VOLUME 1

SECTION 1

PLANNING AND DEVELOPMENT

The Responsibility of the National Environment and Planning Agency

10 Caledonia Avenue Kingston 5

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CHAPTER I

PLANNING AND DEVELOPMENT

I.0 BACKGROUND

The existing Manual for Development was published in 1982. The objective was to assist developers and professionals in the effective planning and execution of development and subdivision projects using official standards and guidelines. Since then many changes have taken place with respect to these matters. Section 1 of this more comprehensive Manual sets out new and updated standards, procedures, guidelines, forms etc. It allows staff of the relevant government agencies, developers. planners and other professionals to have a clear understanding of what is expected of each other. The new data provided may be used under the Town and Country Planning Act as material consideration in the review of development applications.

I.I APPLICATIONS

The standards, guidelines and policies specifically reflect the country's values with respect to design quality and are linked to ensuring acceptable land uses. The availability of these new/updated standards and guidelines should also result in improved and more acceptable applications being made as well as a more timely review process. The policies, procedure, standards and guidelines detailed in this document are intended to educate all those involved in the planning and development process.

I.2 Use of Professional Service

Before acquiring land for development or preparing plans and drawings, the developer should seek professional guidance in respect of the laws, regulations and planning instruments relating to the various aspects of the proposal. The applicant will be expected to submit a proposal which follows national physical development policies as well as sound land use practice and this is best achieved through the use of professional planners, architects, surveyors, engineers, etc. These professionals should familiarize themselves with the various acts relating to development.

For information on the use of professional services the following organizations can be contacted:

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i Jamaica Institute of Architects;

- ii Jamaica Institute of Planners;
- iii Jamaica Institute of Engineers;
- iv Land Surveyors Association of Jamaica;
- v Association of Land Economy and Valuation Surveyors.

I.3 PRECONSULTATION.

It is recommended that proper consultation be made before the start of the development for the following reasons:

- i To save the applicant time and money in preparing detailed layout plans which subsequently may prove to be unacceptable.
- ii To allow the planning authorities to review the proposed location and design concept in order that the application may obtain the maximum advantage of facilities available.
- iii To ensure that the design of the development, particularly in areas where local planning control is not fully developed, will be of such a standard that it is unlikely to deteriorate prematurely.

I.4 WHO TO CONSULT

Consultations should be carried out not only with the private consultative organizations but with the planners in the planning organizations whose job it is to guide developers and others as to what is expected of them. If a site is located in an area where subdivision and development may be prohibited or subject to certain restrictions, they can give advice and suggestions as to the agency/agencies to be contacted to clarify the restrictions that apply.

I.5 SETTLEMENT PATTERN/DEVELOPMENT

Development proposals should conform with the National Settlement Strategy. The settlement strategy concentrates people, social and infrastructural services and economic activities in a manner that will place basic services within the reach of most people at minimum costs, while making for efficiency in land use. A defined hierarchy of settlements, which range from the national centre to the regional, sub-regional and district centres, is the focus of urban development. These centres are expected to provide a range of services, facilities and infrastructure to meet the needs of the catchment population. The following criteria should be used as a guide in planning communities.

CHAPTER 2

LEGAL FRAMEWORK FOR PLANNING AND DEVELOPMENT

2.0 THE TOWN AND COUNTRY PLANNING ACT

The Town and Country Planning Act (Law 42 of 1957) guides and controls development. Its objective is to ensure sustainable land use, protect the land and the physical environment from misuse and premature development, through the preparation of Development Plans and the provision of Development Orders, the legal instrument used to guide and control development.

The Act provides the statutory requirements as well as the guidelines for the preparation confirmation and modification of Development Orders and makes stipulations for Advertisement Control Regulations, Petrol Filling Stations and Tree Preservation Orders. It also states how and when appeals can be made to the Minister and how the appeals are to be handled by the Minister.

It outlines the contents and effects of development orders and the procedures involved in obtaining compensation for the refusal or conditional grant of planning permission on an appeal to the Minister in charge of planning.

The Act states the procedures the local planning authority is to adopt in the revocation and modification of planning permission and the process involved in the enforcement of planning control.

Part VI of the Act deals with powers of entry by the local planning authority, the Authority or the Government Town Planner and how notices are to be served generally under the Act. There are five schedules in the document ranging from the Constitution and procedure for the Advisory Planning Committee, to the Constitution and Procedure of the Compensation Assessment Board. Matters to be dealt with by the Development Orders are also included.

2.1 DEVELOPMENT

Development is defined in the Act as "the carrying out of building, engineering, mining or other operations in, on, over, or under land, or the making of any material change in the use of any buildings or other land."

2.1.1 Operational Development

This activity results in some physical alteration to the land such as "building operations" which is defined in the Act as any structure or erections and any part of a building so defined but does not include plant or machinery. This would therefore include rebuilding and structural alterations.

2.1.2 Engineering

This includes the formation of "means of access" to main or other roads or the construction of roads. "Means of access" includes any means of access whether private or public, vehicular or foot passengers.

2.1.3 Mining

This includes the extraction of minerals and quarrying activities.

2.1.4 Other operations

Any development taking place which is not mentioned above and which would alter the land physically.

2.1.5 Material Change of Use

The use of land or buildings unlike operational development is concerned with the activities carried on in buildings or on land. There is no statutory definition of material change of use and there is no development unless the change of use is material. The question of whether there is a material change is a matter of fact and degree. A change of use is material if:

- i It has planning consequences on the neighbourhood; or
- ii There is a change in the character of the use; or
- iii The purpose of the use is different from the old; or
- iv There is a change in the degree of an existing use which was marked

For a change of use to constitute development, which is what planning is concerned about, it must be substantial, large, considerable, big and solid. If it is not then it falls outside the scope of the definition.

2.2 MATTERS THAT ARE NOT REGARDED AS DEVELOPMENT

Some operations and changes of use are so minor that they do not affect the public interest. In such circumstances there is no need for planning to be involved. This is recognized by the Act that makes certain matters fall outside of the definition of Development. These can proceed without the need for planning permission. They are:

- i Works of maintenance, improvement or alteration of any buildings as long as it is internal and do not affect the external appearance of the building.
- ii Works carried out by a Road Authority for the purpose of maintenance or improvement on land within the road boundaries.
- iii The carrying out by any local authority or statutory body of works for the inspection, repairing or renewing of sewers, mains, pipes, cables or other apparatus or the breaking open of any street for that purpose.
- iv The use of any building or other land within the curtilage of a dwelling house for any purpose incidental to the enjoyment of the dwelling house.
- v The use of any land for the purpose of agriculture or forestry and the use of any building occupied with the land and used for this purpose.
- vi Where land and building are used for a purpose of the same class defined in the Development Order.

2.3 STOP NOTICE

Where a development is being carried out in breach of an approved condition or without planning permission and is hazardous or otherwise dangerous to the public, the local planning authority, the Government Town Planner or the Authority can serve on the owner or occupier of the land, any person engaged in the development or any person appearing to have an interest in the land a **Stop Notice**. The Notice shall state:-

- i The name of the person to whom it is directed;
- ii The basis on which the Order is made;
- iii The address on which the development is taking place;
- iv The nature of the development;
- v That the Notice takes effect from the time it is served; and
- vi The period for which the Notice is effective.

2.3.1 Period of Notice

The Stop Notice is for a period of ten (10) days but may be extended as the three bodies see fit. It also has to be posted in a conspicuous place on the premises where the development is taking place or in a courthouse, police station or other public place in the parish.

2.3.2 Failure to Comply Fee and Penalties

Failure to comply with the Notice will make one liable on summary conviction in an R. M. Court to a fine of not less than Twenty-five Thousand Dollars (\$25,000.00) or more than One Million Dollars (\$1M) or in default of payment to a term of imprisonment not exceeding six (6) months.

Where a Stop Notice is served, the local planning authority, the Government Town Planner or the Authority must serve an Enforcement Notice within 14 days of the service of the Stop Notice.

2.4 ENFORCEMENT NOTICE

2.4.1 When Enforcement Notice is Served

After a Development Order is in existence or operation in an area, if any development has been carried out without planning permission or any conditions subject to which permission was granted has not been complied with, then the local planning authority, the Government Town Planner, or the Authority can within 12 years of such development serve the owner, and the occupier of the land, any person who carried out or took steps to carry out these development, any person involved in the preparation of the development plans or the management of the development or operations on such land an **Enforcement Notice**.

2.4.2 Information in Enforcement Notice

The **Enforcement Notice** must state the breach, the steps to be taken to have it corrected and the time period within which this is to be done. It can specify that a building be demolished in order to restore the land to its original condition or the discontinuance of any use of building or land.

2.4.3 **Posting of Notice**

When the notice is served it has to be posted on the development or on the land on which the development is taking place. Another notice is also

to be placed in a conspicuous place on a public building in the parish, e.g., court house, police station, post office, stating where the Enforcement Notice can be inspected and a copy obtained and that any interested persons may make representation to the local planning authority, the Government Town Planner, or the Authority. (These authorities should publish a list of enforcement notices served by them, occasionally in a newspaper).

2.4.4 Discontinuance of Use

The notice usually takes effect 28 days after service for the discontinuance of the use of land and in other cases 3 days after service.

2.4.5 Appeals

Any development to which an Enforcement Notice relates should cease operations. A person on whom an Enforcement Notice is served can appeal to the Minister with the responsibility for Planning within 14 days after the service of the notice.

2.4.6 Steps Required by Notice

If any steps required by a notice have not been taken except the discontinuance of the use of land, the local planning authority may enter unto the land and take those steps. The cost of this is recoverable as a simple debt in a Resident Magistrate Court from the then owner of the land.

2.4.7 Fines and Penalties

Where by virtue of an Enforcement Notice any use of land is required to be discontinued or any conditions are required to be complied with in respect of any use of land or the carrying out of any operations thereon is not adhered to then on conviction in a Resident Magistrate's Court such offender can be fined a maximum of Twenty-five Thousand Dollars (\$25,000.00) or 12 months maximum in jail. If the use is continued, it is a further offence subject to a fine not exceeding Five Thousand Dollars (\$5,000.00) for every day on which the use is continued. Default in payment of this fine will result in the Resident Magistrate making an Order for the interest in the land to be forfeited to the crown. If the use is continued after the second conviction and the offender is found guilty before a Resident Magistrate the land is forfeited to the Crown.

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2.4.8 Injunction

If any person on whom an enforcement notice is served fails to comply with the provisions of the notice within the period specified therein, or if the local planning authority, the Government Town Planner, or the Authority considers it necessary or expedient for any perceived breach of planning control to be restrained, they may apply to the court for an injunction. The court may grant such injunction that it thinks fit for restraining the breach. Rules of court may provide for such injunction to be issued against a person whose identity is unknown.

2.5 **APPEALS**

Appeals to the Minister, under the Town and Country Planning Act, relate to the:

- i Development of land, such as the refusal or approval of applications with conditions by the planning authorities, failure to respond to applications within 90 days of receipt of same, or from the extended period by them, or for an outline application where additional information is required.
- ii Serving of Enforcement Notice. This relates to the unauthorized change of use, erection of illegal buildings and non-compliance with conditions of approval.

2.5.1 Procedure

The Minister may hear an appeal or appoint a person or persons to hear, receive and examine the evidence in an appeal and to submit a written report to him of the findings and recommendations within 21 days of the hearing of the evidence.

The evidence shall be heard within 21 days of the appointment of the person or persons to do so. Where the person fails to do so within the time period, then the Minister shall hear and determine the appeal himself.

2.5.2 Appeals against local planning authorities'/ Authority's decision

Where the appeal is from a decision of the local planning authorities or the Authority it shall be made to the Minister within 28 days of the decision and the Minister shall make a determination within 90 days of the hearing undertaken by the person appointed by the Minister to hear the appeal.

The Minister is not obliged to entertain an appeal if it appears to him that

the local planning authority or the Authority took the right decision in the circumstances. If the Minister decides to entertain the appeal, he should afford both the applicant and the local planning authority (or the Authority) an opportunity of being heard by him. In entertaining the appeal, the Minister may:-

- allow or dismiss the appeal;
- reverse or vary any part of the decision of the local planning authority or the Authority, whether or not the appeal relates to that part and deal with the application as if it had been made to him in the first instance.

The applicant should forward copies of the following documents to the Minister:

- The application to the local planning authority;
- All relevant plans, drawings and particulars submitted to them;
- The notice of the decision or determination;
- All other relevant correspondence with the local planning authority.

2.5.3 Appeal against an Enforcement Notice

Where the appeal is against an Enforcement Notice, the general procedures for making appeals apply and it must be made to the Minister within 14 days of service of the notice. The Minister must also make a determination within 90 days of the hearing of an appeal by the person or persons appointed to hear it. The Minister may:

- i quash the notice if satisfied that permission was not necessary or was granted under the Town and Country Planning Act;
- ii vary the notice if satisfied that the requirements exceed what is necessary for restoring the land to its original condition;
- iii dismiss the appeal.

2.5.4 To the Court of Appeal

A person who is aggrieved by the decision of the Minister regarding an Enforcement Notice can appeal to the Court of Appeal.

2.5.5 To a Judge in Chambers

This relates to the decision of the Valuation Board regarding claims for compensation. A decision by the Judge in Chambers on the matter is final.

2.6 **DEVELOPMENT PLANS/ORDERS**

The Development Order is the principal instrument for guiding and regulating the use of land and ensuring adherence of Government Policies in this regard. It is prepared for any area, whether or not there are buildings on the land with the general objective of controlling the development of land within the area to which it applies with a view to securing proper sanitary conditions and conveniences and the co-ordination of roads and public services, protecting and extending the amenities and conserving and developing the resources of such areas. It consists of a group of maps (plans) and text (statements) that is prepared by the Minister in case of interim orders or prepared by the Authority and approved by the Minister, in case of confirmed orders. The orders allocate lands for various uses, e.g. residential, commercial, etc., they show the government's proposal for roads, parks, open spaces, and other public uses as well as existing uses which it proposes to retain. The preparation of orders for areas can only be done effectively after a development plan has been prepared for an area.

2.6.1 Maps/Plans

The maps/plans included in the development order do not go into precise detail or show exactly which development will or will not be allowed. Developments which accord with the provisions of maps / plans still need planning permission since each individual application is treated on its own merit with regard to layout, design, external appearance and landscaping.

2.6.2 Development Order Categories

Development Orders fall into two categories:

- i Interim Development Order that is prepared by the Minister after consultation with the respective local authority, for the interim control of any land which is not the subject of a Development Order and hence is not under the control of the Town and Country Planning Act. It has the benefits of the features of a confirmed development order but ceases to exist once a confirmed Development Order is prepared for the area.
- ii (Confirmed) Development Order This consists of subject orders

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that deal with a specific subject matter such as Petrol Filling Stations and land in any area whether or not there is an interim order on it. It is prepared provisionally by the Authority after consultation with the local authority (Parish Council) concerned and confirmed by the Minister after publications in the gazette and a daily newspaper for a statutory period. This allows time for objections to be made by the interested persons who are:

- any local authority concerned
- any person who has freehold estate within the area to which the order relates.
- Any person who has a leasehold interest, the unexpired portion of which is a minimum of three years, or who holds the option to renew such lease for a period of three years.
- Any person who is entitled under the Water Act to exercise any right in relation to the use of water in a public stream within the locality and whose interest would be affected by the application of the order.

2.6.3 Grounds for Objection

The grounds for objection are:

- i It is impractical; or
- ii Unnecessary; or
- iii That it is against the interest of the economic welfare of the locality to which it relates.

2.6.4 Submission of Objections

Objection to the provisional order is to be submitted to the Authority in writing along with the grounds for doing so. The Authority will then transmit them with the order and its comments to the Minister.

2.6.5 Confirmation of the Provisional Order

If the Minister is satisfied that the implementation of the order is likely to be in the public interest, he may by notification published in the gazette and a daily local newspaper confirm it with or without modification. It then

becomes a Development Order.

Coastal Development Orders were prepared extending from the Coast to about one (1) mile inland from the main road for nearly the whole island. In addition development orders have been prepared for the parishes of Westmoreland, Clarendon, St. James and St. Ann.

Petrol Filling Station Orders cover the whole island except for St. Ann where the subject matter is now covered by the St. Ann Parish Development Order.

2.6.6 Development Plans

Development Plans provide background information for the preparation of Development Orders. They are not legal documents unless incorporated in the Development Orders, but provide the local planning authority with planning guidelines where no Development Order exists.

2.6.7 Contents of Development Orders

The Town and Country Planning Act states that every Development Order shall:

- i Specify and define clearly the area to which it relates.
- ii Contain the necessary provisions for regulating the development of land in the area to which it applies.
- iii Make provisions for matters in the second schedule of the Act, e.g., roads, buildings, and other structures etc.
- iv Provide for the grant of permission for the development of land in the area to which it applies.
- v Make provisions for regulating the manner in which applications for permission to develop land are to be dealt with by local planning authorities.
- vi Make provisions enabling the Minister to give directions to the local planning authorities restricting the grant of planning permission.
- vii Make provisions enabling the Minister to give directions to local

planning authorities to grant permission for development which is not provided for in the Order.

- viii Make provisions requiring the local planning authority before granting or refusing permission, to consult with persons on organizations prescribed by the Order.
- ix Make provisions for local planning authorities to give to any applicant permission, within the period specified in the Order to receive information about the manner in which his/her application has been dealt with.
- x Make provisions requiring local planning authorities to furnish the Minister with information as to how an application has been dealt with.
- xi Not withstanding the category of the Order, developers and residents are given a clear idea of what will and will not be acceptable in a particular area.

CHAPTER 3

INSTITUTIONAL FRAMEWORK

3.0 THE TOWN AND COUNTRY PLANNING AUTHORITY (TCPA)

Under the Town and Country Planning Act, the Authority is a person or persons appointed by the Minister to be the Town and Country Planning Authority under Section 3 (1) of the Act. From time to time, by order published in the Gazette the composition, powers and duties of the authority are defined. Section 3 (2) also states that the Government Town Planner shall be a member ex-officio of the Authority.

The Authority by law has no staff of its own. Traditionally, however, the Town and Planning Department and presently the National Environment and Planning Agency (NEPA) provides both technical and administrative support to the Authority. Matters relating to the Authority should therefore be sent to NEPA's address. NEPA at present has no legal authority under the Act.

3.1 ROLE AND FUNCTION

The role and functions of the TCPA in the planning are to:

- i Prepare or ensure the preparation of Development Plans and Provisional Development Orders after consultation with the local authority concerned;
- ii Publish a notice in the Gazette and in a local daily newspaper stating that the Authority has prepared a provisional order and invite comments / objections;
- iii Receive comments on or objections to the provisional order and transmit them along with their comments and the order to the Minister for confirmation.
- iv Prepare amending orders to effect amendments to confirmed Development Orders.
- v Carry out minor modifications to development orders upon the direction of the Minister;
- vi Call-in applications under Section 12 of the Town and Country

Planning Act for its determination rather than it being done by the local planning authority.

- vii Process both statutory and non-statutory called-in applications, and make the necessary planning decision.
- viii Serve stop orders and enforcement notices.
- ix Apply to the Courts for an injunction where necessary or expedient to restrain any breach of planning control.
- x Receive claims for compensation under the Town and Country Planning Act;
- xi Transmit claims for compensation to the Compensation Assessment Board;
- xii Authorize any person in writing to enter upon any land for the purposes of inspecting for contravention of a development order or for the serving of any notice under section 23 of the Act.
- xiii Appoint a person to give an applicant whose application has been called in or the local planning authority a hearing if they so desire before the application is determined.

3.2 NATIONAL ENVIRONMENT AND PLANNING AGENCY (NEPA)

The following provides some details on NEPA.

3.2.1 Overview

The National Environment and Planning Agency (NEPA), was recently established as an Executive Agency that became operational on April I, 2001. It is at present and agency under the Ministry of Local Government and the Environment.

The National Environment and Planning Agency (NEPA) represents a merger between the:

- i National Resources Conservation Authority (NRCA)
- ii Town and Planning Department (TPD) and
- iii Land Development Utilization Commission (LDUC)

The Agency results from the work of the Government of Jamaica Public Sector Modernization Programme (PSMP). The aim of the Merger is to integrate environmental, planning and sustainable development policies, programmes and practices to improve customer service.

3.2.2 Mission of NEPA

To promote Sustainable Development by ensuring protection of the environment and orderly development in Jamaica through highly motivated staff performing at the highest standard.

3.2.3 Vision of NEPA

To ensure that Jamaica's Natural Resources are being used in a sustainable way and there is broad understanding of environment, planning and development issues, with extensive participation amongst citizens and a high level of compliance to relevant legislation.

3.2.4 Legislative Mandate

NEPA operates under the following Acts:

- i The Natural Resources Conservation Authority Act;
- ii The Town and Country Planning Act;
- iii The Land Development and Utilization Act;
- iv The Beach Control Act;
- v The Watershed Protection Act; and
- vi The Wildlife Protection Act
- vii The Local Improvements Act

3.2.5 Policies, Plans and Orders

The work of NEPA is guided by the following policies, development plans and orders:

- i Jamaica National Environment Action Plan (JaNEAP) 1999-2002
- ii National Physical Plan
- iii Policy of Jamaica's System of Protection Areas 1997
- iv The National Land Policy 1996
- v Biodiversity Strategy and Action Plan (Draft)
- vi Watershed Management Policy (Draft)
- vii Beach Policy for Jamaica (Draft)
- viii Environmental Management Systems Policy and Strategy (Draft)

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- Volume 1, Section 1
- ix Several Development Plans and Orders at National/Regional/Parish and urban levels, special areas, as well as for specific activities.

3.3 LOCAL PLANNING AUTHORITIES

Under section 2 of the Town and Country Planning Act the local planning authority is:

- i In relation to Kingston and St.Andrew, the Council of the Kingston and St.Andrew Corporation.
- ii In relation to any other Parish, the Parish Council of the Parish and
- iii In relation to any area situated within two or more parishes the person or body that the Minister may in writing appoint.

An example of (iii) is the Negril Green Island Development Order area for which the local planning authority is the Negril Green Island Area Local Planning Authority, which was appointed by the Minister.

3.3.1 Role and Functions of Local Planning Authority

The roles and functions of this planning authority as is set out by the Town and Country Planning Act are to:

- i Receive all planning applications and to dispatch those called-in to the Authority;
- ii Inform applicants of the date on which they should receive a response to their applications and their right of appeal, if they do not receive a response within the prescribed time;
- iii Inform applicants of their right to be heard by a person appointed by the Authority if they so desire, if the application is called-in;
- iv Keep the planning register which records all applications received by the local planning authority;
- v Process and decide planning applications not called-in by the Authority;
- vi Serve stop notices and enforcement notices;

- vii Take legal action against those who breach the planning regulations;
- viii Apply to the courts where necessary or expedient for an injunction to restrain any breach of planning control;
- ix Duly authorize any person in writing to enter upon any land, at any reasonable time to undertake inspection or serve notice for planning breaches;
- x Deal with the control of advertisements;
- xi Revoke or modify planning permission

CHAPTER 4

GENERAL CONSIDERATIONS FOR PLANNING/DEVELOPMENT

4.0 BACKGROUND

This chapter provides information on guidelines and standards for residential, commercial, industrial development and other facilities, which are not specifically dealt with or included under the headings in other chapters of this document.

In using such information reference should be made to the sections dealing with the types of development to which they refer. Some duplication may occur where material has been used to emphasize development requirements under some headings. Section 2 of the Manual should be checked for any requirements under the Environmental Acts or other headings for related matters.

4.1 SITES WHICH WILL NOT RECEIVE APPROVAL

No site will be approved for building or public use which:

- i Consists of or has been filled up with any refuse matter containing or impregnated with faecal, animal or vegetable or any other unstable matter until such matter shall have been properly removed by excavation or otherwise, or shall have been rendered or become innocuous and the site filled up with such material and so treated that it is suitable for building or other public purposes.
- ii Is below the level of the adjacent streets or land, and is actually or liable to be, in a swampy condition until the same shall have been filled or drained satisfactorily. Such site is required to be levelled, drained or filled with such material and to such compaction that it becomes suitable for building purposes.
- iii Is a steep and unstable slope that is vulnerable to erosion, slippage or cause extra-ordinarily costly precautions to safeguard existing buildings or public amenities.
- iv Extends over any drain, ravine, gully, flooded river bed or other storm water channel except with the approval of the local planning authority and upon such condition as may be imposed for the purposes of safety.

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4.2 LOT SIZES

Volume 1, Section 1

4.2.1 Criteria to Determine Size

The determination of lot sizes for residential development depends to a large extent on criteria such as:

- i The cost of the land
- ii The locations
- iii The amenities available in the area
- iv The use that is to be made of the land.
- v The general character of the surrounding area within which the land is located.
- vi The income group to which the development is directed.

4.2.2 Factors to Consider

Factors to be considered should include:

- i Subsoil characteristics that entail an increase in the cost of the development owing to the extra work on foundations or the type of sewage disposal system to be used.
- ii The topography of the site and its drainage
- iii Natural features such as lakes, streams, trees, etc. These should be preserved and be incorporated into the final landscaping of the development where possible.

4.3 **MINIMUM SIZES OF LOTS**

In all cases, the lot area for individual buildings must be sufficient to allow space for buildings and other essential activities. In addition, there must be provision for natural light and ventilation, convenient access for pedestrians, privacy and setback of buildings from road and other property boundaries.

- **4.3.1** The minimum lot sizes for the establishment of Town House and Apartments (see Fig.1) are indicated under "Residential Development". Since the characteristics of the site will to some extent determine the level of development that can take place, developers should discuss their proposals with the planning authorities before embarking on plan preparation.
- 4.3.2 Minimum lot areas for a detach house, duplex or semi-detached dwelling

units (see Figs.1&2) with ground level access shall, subject to satisfactory arrangements for the disposal of sewage and to general amenity be as follows:

- i Detached house (main urban areas)
 - Minimum of 325.15m² for (main urban areas) internal lots.
 - Minimum of 418m² for corner lots.
- ii (Suburban areas)
 - Minimum of 371.6m² for internal lots (4,000 square feet)
 - Minimum of 464.5m² for corner lots (5,000 square feet)

iii Rural Towns

- Minimum of 464.5m² for internal lots (5,000 square feet)
- Minimum of 557.4m² for corner lots (6,000 square feet)
- iv Rural areas
 - A minimum of 1011.75m²
- v Semi-detached or Duplex house (for each half)
 - Minimum of 278.7m² for internal lots
 - Minimum of 371.6m² for corner lots

4.4 **REDUCING LOT SIZES**

The minimum size of lots may be reduced for housing schemes where the layout indicates that this can be done and the required amenities and utility services are available to satisfactorily support the level of development proposed.

- **4.4.1** The minimum lot width for detached housing in all areas should be a minimum of 12.19m and 10.7m for each half of a semi-detached house.
- **4.4.2** Generally the ratio of plot width to length should not exceed 2 to 5 i.e., the width of the plot should not be less than 40% of the length.

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4.5 SETBACKS

4.5.1 Side and rear yards

Yards are required to provide the set backs from lot boundaries, to afford space for maintenance, to create privacy, to allow sufficient space for natural light and air to penetrate all windows and to provide useful outdoor living and amenity spaces.

The following guidelines are suggested for minimum setbacks from side and rear boundaries:

- i Side yards where provided should be not less than 1.2m per floor single and multi-storey residential buildings measured from property boundary to the face of the building. This distance may be varied by the planning authorities depending on the circumstances of the situation such as the height of the building.
- ii Rear yards should not be less than 1/3 the height of the building or 3m whichever is the greatest. For medium and low densities a minimum of 14.9m or 2/3 the height of the building, whichever is the greater, for rear yard setback, is recommended.

All measurements are taken from the nearest point of the building to the property boundary.

4.6 SETBACK FROM ADJOINING ROADS

For front yard set back from road boundary the following is recommended:-

TYPE OF ROAD	ROAD RESERVATION (Metres)	BUILDING SET BACK FROM ROAD CENTRE LINE (M)
Arterial primary roads due for dualization	30.48 – 36.57	21.3
Secondary main roads	15.2 – 22.9	15.2
Parochial roads Service roads	9	Varies depending on location and type of development.

These standards may have to be varied for starter homes.

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4.7 **BUILDING HEIGHTS**

4.7.1 General

Building heights indicate the maximum elevations to which buildings will be permitted and is expressed as a linear measure or the number of storeys permitted.

Where it is expressed in metres, the height is measured from the lowest level of the ground on which the building stands (see Fig. 3). Where the land slopes downward from the road or roads adjoining the building, the height of the building is taken as the vertical distance from the adjoining road to the top of the building.

4.7.2 Height Standards

Height standards are used to:

- i allow for privacy for the occupants
- ii ensure adequate natural light and ventilation for the buildings.
- iii preserve important views
- iv achieve compatibility in the size and scale of buildings in an area

4.7.3 Maximum Heights

The maximum height of buildings will be determined by the density of the development allowed in an area, the character of the existing development and the need to ensure that the environment will not be adversely affected.

In approving an application with building height exceeding two storeys or 7.6m the development should not have a detrimental impact on:

- i the levels of amenity and privacy presently enjoyed on neighbouring lots
- ii the visual amenity of any ridge line.

The set backs from any lot line may be increased by the planning authority in order to protect privacy and visual amenities.

4.8 ENCROACHMENT OR OVERHANGING OF SETBACKS

No part of any building should project beyond the established building line except as determined by the planning authorities. The maximum allowable encroachments are as follows:

- i Upper storeys minimum of 3m above ground 1.8m beyond the building line provided that such projections do not interfere with the planting of trees.
- ii Open fire escape 1.8m into side or rear yard;
- iii Eaves, awning, sun canopies 2.4m maximum beyond building lines.
- iv Uncovered steps and porches 0.9m maximum beyond building line.

For commercial buildings the portion of the building beyond the building line must not be useable commercial space and must not in any way impede the flow of pedestrian and vehicular traffic.

4.9 DISTANCE BETWEEN BUILDINGS

All residential buildings within the densest area in the centre of town should keep a minimum distance to front and rear boundary to permit a light angle of about thirty degrees (30°). The light angle is measured between a vertical line from ground at the front or back fence and a line joining the highest point of caves or parapet to the same point at ground level.

- **4.9.1** The distance to front and back fences should be a minimum of 1/3 of the height of the building;
- **4.9.2** The minimum distance between buildings of the same height should be 2/3 the height of the building but should not exceed 21.3m at the upper storeys. Road width has to be added if this is between.
- **4.9.3** In areas of lower density, the minimum light angle should be 45 degrees, that is the minimum distance from fence line to building should equal the height of the building and the minimum distance between buildings of the same height should be double the building height plus road width.
- 4.9.4 For suburban areas and rural areas, the minimum light angle should be 60

degrees (60°) (which means minimum distance times building height between buildings of the same height plus road width.

4.9.5 Light angles are used as measurement of a distance and not to secure a minimum quantity of light. As the sun stands high all year round, the problem is not to provide light but adequate ventilation and to avoid overlooking.

4.10 SITE COVERAGE

- **4.10.1** This is the site area covered by a building or buildings and paved areas, while building coverage is the extent to which the outermost walls of the building covers the site. They are usually expressed as a percentage of the site areas on which the buildings are located.
- **4.10.2** The maximum site coverage standard is designed to enable the erection of a building with adequate space for:
 - i Landscaping
 - ii Privacy and circulation of vehicles
 - iii Natural drainage and infiltration of surface run-off

The minimum site coverage allowed for the various types of development is indicated in the various sections. The development orders should also be consulted in this regard.

- **4.10.3** The suggested site coverage is as follows:
 - i For single family residential purposes, a maximum of fifty (50) per cent.
 - ii For commercial and office purposes, thirty-three and one third (33 I/3) percent to fifty percent (50%) depending on whether the development is in a business area or in other areas.
 - iii In areas consisting of a mixed development of residential and other uses the maximum coverage should be fifty percent (50%).

4.11 FLOOR SPACE INDEX (FLOOR AREA RATIO) (SEE FIG. 6)

This is a measure of development that is expressed as a ratio of the total allowable floor area of a building to the total site area (see Fig. 5). It can also be expressed as a percentage by dividing the total floor area of development on the site and the

site area. The purpose of it is to control the bulk of a building at a given location to a level which is commensurate with existing facilities and amenities in the area.

Floor area ratio for the various types of development is indicated in the various sections dealing with housing and commercial development.

Although height and the site coverage are used to determine the intensity of development in resort areas, they are not recommended for use in residential development.

4.12 RESIDENTIAL DENSITY

Residential density is used as a control mechanism to deal with the physical intensity and size of building and to control the number of people living on a particular site or in a geographical area. It can be expressed as:

- i Number of dwellings per hectare
- ii Number of bedrooms per hectare
- iii Number of habitable rooms per hectare
- **4.12.1** Since the actual occupancy of a unit of accommodation is a variable that is dependent on such factor as tenure, size and mix of units of accommodation, density is best expressed in terms of habitable rooms per hectare, rather than persons per hectare or bedrooms per hectare.
 - i The use of standards in residential density is to control the amount of development so that the development can be:
 - Accommodated on the site without affecting the established character of the area;
 - Adequately served by existing and planned infrastructure and social facilities and amenities;
 - Respectful of the rights of adjoining residents to enjoy adequate light, ventilation, views and privacy.
 - ii The actual gross or net density which is permitted on a particular site depends on the size of the site, the physical characteristics of the area and the general density standards in relevant area development plans and policies in which the development is located, is determined by the relevant planning authority or NEPA.

- iii While density is useful in assessing residential proposals it is difficult to apply precisely especially in small scale infill developments, where site circumstances can determine the number of dwellings likely to be possible. To ensure satisfactory standards of development the amenity space, floor area ratio, security, privacy and the provision of adequate car parking spaces are considered.
- iv In calculating density, all the rooms are regarded as habitable rooms except kitchen and bathroom. Landing stair, passages and storerooms of less than 6.5m2 are exclude. Where a room can be divided into other habitable size rooms the number of rooms that could be created will be counted as habitable rooms.
- v Where the proposal is for a site with an existing building, the density of the proposed development should be calculated as follows and shown on the drawings being submitted for approval:
 - Density for the whole site including habitable rooms in the existing building plus the new proposal.
 - Density for the existing building on its reduced site area.
 - Density for the new proposal on its new site area.
- vi The density for an area would influence the decision as to whether the future development should be predominantly low, medium or high.
- vii Low densities are usually in the form of single family houses on individual lots of about eight to twenty (8 20) houses to the hectare. They are appropriate where the site is of irregular shape, the adjacent buildings are low rise and where there are trees and other features to be retained.
- viii Medium density is usually 125 habitable rooms per hectare and is appropriate for the edge of the inner city where compact development can be accommodated making economic use of high value land. These are usually apartments not exceeding 4 stories in height.
- ix High density developments are usually over 125 habitable rooms per hectare with those 126 250 habitable rooms per hectare

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being allowed to go as high as 6 stories while those up to 375 habitable rooms per hectare can go as high as 10 floors. These densities are usually in the inner city areas where infrastructure is available. The buildings are usually in the form of tower blocks.

- x In all cases the demand for physical services that would be generated such as roads, water supply, sewage disposal, etc. should match the availability of these amenities in the particular locality.
- xi In the case of hotel development density may also be expressed in terms of bedrooms per units of land area.
- xii Residential density may be calculated on the basis of gross or net land area. Gross land area refers to the total land area of the development site and not to the total land area minus land allocated to streets, open space, parking and other non-residential facilities.

4.13 ADJACENT PARCELS

In considering the application in an area, adjacent parcels of land belonging to the same owners may also be taken into consideration if necessary, whether or not it was part of the application. In such case, the design of the subject application will be correlated with the future development of the adjacent property.

4.14 PARKING AND LOADING

4.14.1 General

Provision should be made within the boundaries of the site of all new and extended buildings for the parking of customers' vehicles in accordance with standards provided that:

- i Special consideration can be given to dual use of parking areas in mixed development where the uses alternate in terms of time scale.
- ii Where the use of any building is not specifically mentioned in the schedule or more than one use is involved, the planning authority shall determine the parking provision.
- iii A standard allowance of approximately 27.87sm of parking site area, inclusive of driveways, should be made for each car.

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- iv Parking spaces of practical shape which allow for the parking and manoeuvring of vehicles should be provided. Narrow and obstructed spaces, whatever the size, are of limited value for the purpose of proper parking.
- v Provision should also be made within the site boundaries for loading trucks and goods vehicles. The number of loading bays should be determined in accordance with the standards laid out in the Development Orders. The Planning Authority may, however, waive this requirement when the building area is too small, the frontage of the site is short and service is not possible from the rear.

4.14.2 The Design Of Parking Facilities (See Figs. 7-12)

The condition governing the design of parking facilities for enclosed and unenclosed parking is an unobstructed rectangular minimum space of $5.5m \times 2.5m$ for each car, so, however, that: –

- i where parking is parallel to the kerb the length of the car parking space shall be increased to 6.7m;
- ii where a vehicle can overhang the kerb by 0.6m and such overhanging does not seriously limit the use of a sidewalk or other access, the length of the parking space may be reduced to 4.88m;
- iii where the use of one car parking space is limited on both sides by a wall or column, the unobstructed width (face to face of obstruction) of the parking space shall be 3.0m or if a door opens into the parking space on its long side, 3.36m;
- iv where the use of one parking space is limited on one side by a wall or column, the unobstructured width (face to face of obstruction) of the parking space shall be 3.0m;
- v the minimum width of a parking aisle shall be 6m except where parking is provided at a lesser angle to the aisle than 90 degrees and access is one way only, in which case, the following aisle width shall apply;

4.14.3 Angle of parking – minimum aisle width

30 degrees	-	3.36 m
45 degrees	-	3.97m
60 degrees	-	5.5m

4.14.4 Parking Garages

In the case of parking garages with columns, care must be taken to ensure proper movement of vehicles and in no case should a column project into a minimum parking space aisle.

For parking garages, carports and parking areas, the maximum gradient and the maximum cross slope shall be 1 in 20

4.14.5 Loading and Off-Loading Bays

In certain types of developments, developers will be required to provide loading and off-loading bays within the curtilage of the site.

Each bay shall have an unobstructed rectangular space 6.7m by 3.0m and reasonably vehicular access shall be provided to each bay.

The parking provision for disabled drivers should be as is indicated in the appendix.

PARKING AND LOADING REQUIREMENTS

Schedule of Vehicle Parking Requirements Within Site Boundaries

Type of Development	Minimum number of vehicle parking spaces required
Private residences (up to two bedrooms)	1 for each individual unit
Private Residence (over two bedrooms)	2 for each individual unit
Apartment buildings and town houses	1.25 for each individual unit
Elderly persons accommodation (self-contained dwellings)	2 per three units
Elderly persons accommodation (Grouped flatlets)	1 per three one bedroom units
Guest Houses	1 for each 2 guest unit plus 1 for each 4.5 square metres of public dining room.
Motels and Hotels	 for each guest unit plus 1 for each 4.5 square metres of public dining room. coach parking space per 50 bed spaces in hotels.
Villas	1 per 2 bedroom villa 2 per 3 bedroom villa
Hostels for students	 space for every 4 units plus space per 2 full-time members of staff
Civic Administration Building, Office Building, Libraries	1 for each 20 square metres of floor area inclusive of storerooms plus 1 space per unit for staff parking where the building is divided into smaller units.
Museums and Art Galleries	1 space per 30 square metres of public display space.
Shops, stores, supermarkets	1 for each 20 square metres of gross floor area inclusive of store-rooms plus 1 space per unit for staff where the building is divided into smaller units. (The same applies to shopping centres).

Type of Development	Minimum number of vehicle parking spaces required
Markets	To be assessed individually

Restaurants	1 for each 4.5 square metres of public dining room
Take-away Fast Food Shops	6 spaces per unit, plus 1 for each 4.5 square metres of dining area or public dining room
Industrial buildings used for manufacture or store	1 for each 185 square metres of gross floor area including office space, plus provision for trucks as indicated in vehicle loading requirements.
Dance Halls, Clubs and Bars	1 space per 2 square metres of public floor area.
Games Buildings, Public or Exhibition Halls	1 space per 3 staff members plus 1 space for every 10 square metres of exhibition area.
Cinemas, Concert Halls, Theatre	Town Centre locations, 1 space per 10 seats. Other locations -1 space per 5 seats.
Primary schools	1 space for every 5 teachers, plus 1 space for every 5 non-teaching staff.
Post Secondary Institutions (Colleges, Universities etc.)	1 space to be provided for every 2 members of staff plus 1 space for every five (5) full-time equivalent students in addition to administration requirements.
Hospitals	1 space for each 4 beds
Clinics / Health Centres	3 spaces for each practitioner
Group medical, Veterinary or Dental Practices	2 spaces per practitioner
Creche, Day Nurseries or Day Care Centre	1 space per 3 staff members plus an area for setting down and picking up of children.
Assembly Halls, Auditoriums, City and Town Halls, Court House, Lecture Halls	1 for each 8 seats
Place of public worship or religious instruction	1 space per 7 seats or 1 space per 10 square metres if no permanent seat is provided.
Type of Development	Minimum number of vehicle parking spaces required
TABLE IN THE DESCRIPTION OF THE	5 car parking spaces per service bay plus a minimum of 3
Petrol Filling Station	car parking spaces up to a site area of 500 square metres and an additional space for each additional 250 square metres.

Tennis/badminton	4 spaces per court
Parking for disabled	In all parking areas for developments open to the public consisting of $3 - 19$ spaces – at least 1 space; 20 spaces or more – a minimum of 5% of the total number of spaces.
TYPES OF BUILDING	NUMBER OFLOADING OR OFF-LOADING BAYS
Shops, showrooms, stores, markets hospitals	1 for each building up to 930 square metres plus 1 for each 1,850 square metres of floor area in excess of 930 square metres. 1 for each 930 square metres thereafter.
Industrial buildings, used for manufacture or storage	1 for each building up to 460 square metres plus 1 for each 930 square metres of floor area in excess of 460 square metres to a total of 3.1 for each 4,60 square metres thereafter

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CHAPTER 5

OPEN SPACE AND COMMUNITY PLANNING

5.0 **OPEN SPACE**

5.0.1 General

As the population increases there is greater demand on the existing open spaces due to the increase in leisure time, easier access to transportation, higher incomes, etc. The solution is to maximize the use of the resources that are available.

5.0.2 Description of Open Space

Open space may be regarded as space which is not used for development and could be air, land or water. It may be used for recreation, water supply, tourism, economic development and include:

- i Parks and gardens
- ii Urban green spaces (woodlands, scrub etc.)
- iii Green corridors (river banks, rights of way etc.)
- iv Outdoor sports facilities
- v Amenity green space
- vi Provision for children (play areas etc.)
- vii Allotments and urban farms
- viii Cemeteries and church yards
- ix Civic spaces (market squares etc.)
- x Watersheds
- xi Open space shall not be deemed to include buildings, parking areas, or other surfaces designed or intended for vehicular travel.

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- x All open space areas shall be covered with grass ground cover, shrubs, flowers, hardscape construction (i.e. exposed aggregate, paving etc.)or consist of recreation facilities i.e. swimming pool, tennis court, jogging trail, etc.
- xi There are several needs that can be met through the provision of open space. These include:
 - Social inclusion and community cohesion by providing a focus for the community and a place to meet others.
 - Health and well being promoting healthy living and social development.
 - Sustainable development ensuring easy access by walking, or public transport
 - Economic development affecting areas such as tourism, real estate values, etc.
 - Enhancement and protection of the natural resource base, i.e., air, water, soils, animals, plants etc.

5.1 MAINTAINING OPEN SPACE

5.1.1 Quality of Open Space

The quality of the open space provided should be high in terms of facilities, layout and design and should meet the needs and aspirations of the users. They should also meet environmental standards and contribute to good civic design.

5.1.2 Building on

Existing open space, sports and recreational buildings and land, should not be built on unless an assessment has been done which shows that it is surplus to requirements.

5.1.3 Consulting Local Community

Applicants must consult the local community and demonstrate that their proposals are widely accepted by them before any land with / without development will be released.

5.1.4 Protection of Open Space

High quality open space that are of particular value to a community e.g. small areas of open spaces in urban areas will be recognized and given protection by the planning authorities.

5.1.5 Exchange of Use

The exchange of the use of one site for another to substitute for any loss of open space will be supported by the planning authorities if the land is as accessible and valuable to the potential new users in terms of size, usefulness, attractiveness and quality.

5.2 **GUIDELINES FOR THE LOCATION OF RECREATIONAL FACILITIES**

In addition to the local factors, the following will be considered by the planning authorities:

- i Promoting accessibility for walking, cycling and public transport
- ii The provision of open space in industrial and commercial areas
- iii Improvement of the quality of the public realm
- iv The security and provisional safety, especially in regard to children.
- v The needs of tourists and visitors

5.2.1 Recreational Facilities

Facilities that will attract large numbers of visitors will preferably be allowed in highly accessible areas, which adjoin or are adjacent to towns or district centres.

5.2.2 Stadiums and Sports Development

Stadium and major sports development that will attract large numbers of spectators will only be allowed in areas with good access to vehicular traffic.

5.2.3 Open Spaces

Provisions will be made in new housing developments for open spaces to accommodate local sports and recreational facilities.

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5.2.4 Sport and Recreation

Sport and recreation requiring national features and water will be granted only where the impact on the environment is minimal.

5.2.5 Development in Areas of Outstanding Beauty

In areas of outstanding beauty any development which may be allowed should be consistent with the primary objective of conservation of the natural beauty of the landscape and the need of agriculture, forestry, etc.

5.3 **PLANNING CONSIDERATIONS**

Consideration of any planning application involving development of playing fields will only be supported where it is ancillary to the field and does not adversely affect the pitches or where the land is incapable of forming a pitch.

5.3.1 Open Space

Open space must be planned as a land use in its own right, in the right location and should not be the remainder when other land uses have been provided. It should be accessible, suitable, functional and useable and not merely an area included to make up the required standards.

The open space should be located where it is visible from public roads and accessible to all segments of the population including the disabled to enhance as wide a usage as possible.

5.3.2 Local Open Space

Local open space should be located within a short walking distance from the residents it intends to serve preferably within a radius of not more than about 0.4km.

In industrial areas, local open space should be used as a buffer between industrial areas and adjacent uses.

5.3.3 Entrance to Open Space

Entrance to open space should be easily identifiable and accessible and active recreational activity should be centralized to confine the impacts of

noise and movement of users.

5.3.4 Greening

To encourage greening, sky gardens with greenery on buildings will be encouraged in all areas.

Building setback and piazzas for greening and passive recreational use should be included at the planning and design stage of commercial and office buildings to enhance the attractiveness of the public space.

5.3.5 Local Areas

As a general rule in local areas, landscape plans should be prepared for parks, gardens, promenades and sitting out areas to maximise green opportunities. Instead of large areas of hard surfacing, trees should be extensively used to soften local environments.

5.3.6 Concentration of Open Spaces

Concentrating the majority of open space in a single area may be more effective than a series of small areas and will be encouraged, especially in developments less than 10 hectares.

5.4 ACCESS TO OPEN SPACE

Access to open space will be required at the earliest stage of development and before the completion of built development on a maximum of 50 percent of the site. The development of the open space is the responsibility of the developer. The responsibility for maintenance and up keep of communal open spaces in a development is that of the owners of the development.

Access to open space must be through a clear designated route and entrance(s) that is well located and minimizes pedestrian and vehicle conflict.

5.5 ENHANCING OPEN SPACES

- **5.5.1** Grass verges, small areas located near the entrance to the development or back lands on steep slopes will not be qualified for assessment as open space.
- **5.5.2** Planning permission will be given to the pooling of open space by developers, i.e., locating their open space adjacent to a neighbour's. The

minimum site requirements for open space will still be required. This will be subject to the travel distances for residents of the development site being satisfactory.

- **5.5.3** Public open spaces should be treated as focal areas onto which houses front, rather than tucked away behind the backs of houses.
- **5.5.4** The landscape design including the retention of existing features and their visual setting must be incorporated into the initial design process
- **5.5.5** Where special features exist, wherever possible, the open space will be provided adjacent to it, to maximize its quality, use and enjoyment by the public.

5.6 SINGLE FAMILY DETACHED OR SEMI-DETACHED DEVELOPMENT

In housing developments, spaces such as parks, playgrounds and sports field are needed as part of the public areas. To ensure that this need is satisfied, in all new residential areas in excess of 10 lots, usable land must be reserved for the community non-residential needs at a minimum rate of one hectare to every 100 dwelling units. Such land should be landscaped initially and otherwise be developed and transferred to the local planning authority to be held on behalf of the lot owners or to the lot owners themselves, by endorsement on their titles.

5.6 MULTI-FAMILY DEVELOPMENT (TOWN HOUSES AND APARTMENTS)

Space must be set aside for recreational and landscaping purposes which is different from the land reserved for the building, car parking, driveway areas, footpaths, accessory building and ancillary uses where required. This is referred to as the amenity area and will normally be a portion of the total site, but may also include swimming pools, communal lounges and other general areas within the site which in the judgment of the planning authorities can be used for general recreational purposes (see Fig. I3 and Appendix I).

The minimum common amenity area for each unit should be provided as follows:

- i Studio unit 15 square metres
- ii One bedroom unit 30 square metres
- iii Two or more bedroom units 60 square metres

5.7 INDUSTRIAL AND COMMERCIAL DEVELOPMENT

In planning for new industrial, industrial office, business area, special industrial area

or commercial and office development, a minimum standard of 0.5m2 local open space per worker for landscaping and recreation use should be provided.

5.8 EXEMPTION

Land use for septic tanks, tile fields and other sewage and garbage treatment and collection facilities and land that will be used for commercial agricultural purposes will not be counted in the open or amenity space requirements.

5.9 SITE PLANNING

Where active recreation facilities are provided within public open space area, adequate screening should be provided between that area and other adjoining uses.

A portion of all open space areas should be allocated and landscaped for passive recreation such as relaxation and walking. The recommended recreation facilities within parks or play lots include paved areas for court games e.g., tennis, basket ball, and/or areas for children's play equipment, while those within local recreation grounds include football field, cricket pitch, pavilion, or additional paved areas for court games.

- **5.9.1** The location of open space areas should be related to the overall layout and the design of these areas should have regard to the nature and intensity of activities being conducted on site.
- **5.9.2** In submitting an application for development, developers will be required to state the type of facilities that will be provided and how their preparation will coincide with the construction of units.
- **5.9.3** In land settlements where homesteads are provided, lands should be reserved for open spaces large enough to accommodate a football or cricket field.
- **5.9.4** Where the settlement adjoins a neighbourhood without these facilities, then provisions should be made for them in the subdivision

5.10 MANAGEMENT OF OPEN SPACES

The maintenance of open spaces in residential subdivisions is the responsibility of the citizens living in that development.

5.11 HISTORICAL SITES, BUILDINGS, AND MONUMENTS

The Jamaica National Heritage Trust law makes provisions for the preservation of national monuments, sites and objects of historical importance. These, if they are likely to be affected by development proposals will be referred to the National Heritage Trust for their recommendations, and permission to develop will be given only after consultation with that body.

Owners of buildings of architectural and / or historic interest should recognize the importance of preserving these buildings, as they represent an essential part of the island's cultural heritage. Where works of preparation are necessary every effort

should be made to ensure that the original design is preserved. In this regard, consultations should be had with the Jamaica National Heritage Trust and the planning authorities.

Owners of property on which there are historic relics, should consult the National Heritage Trust Commission with a view to restoration and preservation within a compatible environment and within the context of viable development, where this is contemplated.

5.12 COMMUNITY PLANNING

As a standard of the requirements for community facilities in neighbourhoods of different sizes the following facilities shall be provided:

5.12.1 Development of 200 to 600 dwelling units

- i shops e.g. grocery, pharmacy etc.
- ii a primary school including basic school (unless one exists in the immediate vicinity)
- iii- communal areas (including parking, sidewalks, commercial space, park and play areas)

5.12.2 Development of 601 to 1000 dwelling units

- i a primary school, basic school/day care centre
- ii commercial area of 10 square metres per family including covered and open areas, parking, petrol station, etc.
- iii communal areas including parking spaces, access roads, sidewalks, park and play area

5.12.3 Development of 1001 to 3000 dwelling units

- i adequate educational facilities for the anticipated school age population
- ii space for commercial, cultural, and social activities at the rate of approximately 10 square metres per family
- iii a small administrative centre e.g., government office
- iv communal areas including parks, playgrounds, parking spaces,

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sidewalk etc.

- v a church
- vi a sports field

CHAPTER 6

PERMITTED DEVELOPMENT AND CLASSES OF USE

6.0 DEVELOPMENT NOT REQUIRING PLANNING PERMISSION

Certain types of development are given a general permission by development orders and maybe carried out without having to obtain planning permission from the authorities. These are usually defined in the Fourth Schedule of a Development Order, accompanied by the conditions related to them. The following are guides to residents and business people as to what they can do with or without requiring planning permission and is adopted from the (St. Ann Parish) Confirmed Development Order 1999.

6.1 A GUIDE FOR RESIDENTS

The paragraphs below explain when a person/company may or may not need to apply for a planning permission:

- i House extensions and additions including conservatories, sun lounges, enclosing existing balconies or verandahs, loft conversions, dormer windows and roof additions.
- ii Buildings and other structures on the land around your house, for example, garages, garden sheds, greenhouses and swimming pools.
- iii Adding a porch to your house.
- iv Putting up fences, walls, and gates.
- v Patios, hard standings, paths and driveways.
- vi Satellite dishes, and television and radio aerials.
- vii Decoration, repair and maintenance.

6.2 HOUSE EXTENSIONS

Planning permission must be applied for to extend or add to a house in the following circumstances:

- i In order to build an addition, which would be nearer to any highway than the nearest part of the "original house", unless there would be at least 15.24 metres between the house (as extended) and the highway. The term "highway" includes all public roads, footpaths, bridleways and byways. (There are special rules for porches, see 6.4).
- ii Where additions or other buildings would cover more than half the area of land around the "original house".

The term "original house" means the house as it was first built or as it stood when the Development Order was published. Although the present owner may not have built an extension to the house, a previous owner may have done so.

6.2.1 Height Limits for Extensions

Planning permission is also required if the extension or addition exceeds the following limits on height and volume:

- i The extension is higher than the highest part of the roof of the "original house"; or
- ii any part of the extension is more than 3.6m high and is within 1.5m of the boundary of the property. (Loft conversions and dormers have separate rules, this is explained below).

The height of a building should be measured from the ground level immediately next to it. If the ground is uneven, measurements should be from the highest part of the surface, unless volume is being calculated.

6.2.2 Volume Limits for Extensions

Planning permission must be applied for before building an extension:

- i For a terraced house (including an end of terrace house) or any house in a Conservation Area, National Park, an area of outstanding natural beauty – the volume of the "original house" would be increased by more than 10% or 50 cubic metres (whichever is the greater);
- For any other kind of house outside those areas, the volume of the "original house" would be increased by more than 15% or 70 cubic metres (whichever is the greater);

iii In any case, the volume of the "original house" would be increased by more than 115 cubic metres

6.2.3 Volume Considerations

(Volume is calculated from external measurements).

In the following circumstances, the volume of other buildings that belong to a house (such as a garage or shed) will count against the volume allowances. In some cases, this can include buildings that were built at the same time as the house or existed when the Development Order was published.

- i If an extension to a house comes within 5 metres of any building belonging to that house, the volume of that building counts against the allowance for additions and extensions.
- ii Any building which has been added to a property and which is more than 10 cubic metres in volume and which is within 5 metres of such house is treated as an extension of the house and so reduces the allowance for further extensions without planning permission.
- iii If the house is in a conservation area, a national park, an area of outstanding natural beauty all additional buildings which are more than 10 cubic metres in volume, wherever they are in relation to the house, are treated as extensions of the house and reduce the allowance for further extensions.

If any of these cases apply, the volume of the building concerned will be deducted from the volume limit for extensions and additions to the house. For example, if the volume limit is 50 cubic metres and a building of 15 cubic metres in volume is treated as an extension to the house, then the volume limit for extensions would be reduced to 35 cubic metres.

6.2.6 Special limits for Roof Extensions, Loft Conversions and Dormer Windows.

There are some special rules which apply to these kinds of extensions to a house.

One does not normally need to apply for planning permission to re-roof a house (see 6.8) nor for the insertion of roof lights or skylights.

An application for planning permission must be made, however, if the house

is in a conservation area, a national park, an area of outstanding natural beauty in order to build an extension to the roof of the house or any kind of addition that would materially alter the shape of the roof.

Outside those areas, planning permission must be sought if any of the following circumstances apply:

- i Where an addition or extension to any roof slope which faces a highway is to be built.
- ii The roof extension would add more than 40 cubic metres to the volume of a terraced house or more than 50 cubic metres to any other kind of house. (Note : the volume limits for extensions described in this section are the total allowed for a house. Any additional volume created by a roof extension will count against the total volume limit for the house).
- iii The work would increase the height of the roof.

6.3 BUILDINGS AND OTHER STRUCTURES ON THE LAND AROUND A HOUSE

Many kinds of buildings and structures can be built in a garden on the land around a house without the need to apply for planning permission. These can include sheds, garages, greenhouses, accommodation for pets and domestic animals, summer houses, swimming pools, ponds, sauna cabins, enclosures (including tennis courts) and many other kinds of structures.

6.3.1 Planning Permission Needed

Planning permission must be obtained if any of the following cases apply:

- i To construct a building or structure which would be nearer to any highway than the nearest part of the "original house", unless there would be at least 15.24m between the new building and any highway. The term "highway" includes public roads, footpaths, bridleways and byways.
- ii Where more than half the area of land around the original house would be covered by additions or other buildings.
- iii When the building or structure is not to be used for domestic purposes and is to be used instead, for example, for parking a commercial vehicle, running a business or for storing goods in connection with a business.

iv To construct a building or structure which is more than 3 metres height, or more than 4 metres high if it has a ridged roof. (Measure from the highest ground next to it).

The meaning of "original house" is explained in Paragraph 6.2.

Note: If a new building would have a volume over 10 cubic metres, and comes within 5 metres of the house, it would be treated as an extension and would count against the overall volume entitlement.

6.3.2 Fuel Storage Tanks

Application for planning permission must be made in the following circumstances:

i To install a storage tank which would be nearer to any highway than the nearest part of the "original house", unless there would be at least 15.24m between the storage tank and any highway. Note: The term "highway" includes public roads, footpaths, bridleways and byways.

6.4 Adding a Porch to a House

Planning permission must be applied for if the porch:

- i Would have a ground area (measured externally) of more than 3 square metres;
- ii Would be higher than 3.66 m above ground level where there is a ridged roof (advice on measuring height is given in Paragraph 6.2); or
- iii Would be less than 15.24 metres away from the boundary of a dwelling house with a highway (which includes all public roads, footpaths, bridleways and byways).

6.5 PUTTING UP FENCES, WALLS AND GATES

Planning permission is necessary if:

- i A house is a listed building or is within the curtilage of a listed building; or
- ii The fence, wall or gate would be over 1 metre high and next to a highway used for vehicles; or over 2 metres high elsewhere.

Planning permission is not required for hedges or trees. However, if there is a condition attached to the planning permission for a property which restricts the planting of hedges or trees (for example, on an "open plan" estate or where a sight line might be blocked), the council's consent must be obtained to relax or remove the condition before planting a hedge or tree screen. If there is uncertainty about this, a check can be done with the planning department of the council.

6.6 PATIOS, HARD STANDINGS, PATHS AND DRIVEWAYS

There are no restrictions on the area of land around a house which can be covered with hard surfaces.

Planning permission must be obtained only if the hard surface is not to be used for domestic purposes and is to be used instead, for example, for parking a commercial vehicle or for storing goods in connection with a business.

A separate approval of the Superintendent of Roads and Works of the council or the National Works Agency is required if a new driveway would cross a pavement or verge. Planning permission is also necessary if a new or wider access is to be made for a driveway on to a trunk or other classified road. The Superintendent of Roads and Works of your council or the National Works Agency can advise if the road falls into this category.

6.7 SATELLITE DISHES, AND TELEVISION AND RADIO AERIALS

Normal domestic TV and radio aerials do not need planning permission.

In certain circumstances, planning permission is required to install a satellite dish on a house. Check with the local planning authority.

If a house is a listed building, a listed building consent may be needed to install a satellite dish on such a house.

6.8 DECORATION, REPAIR AND MAINTENANCE

Planning permission is not needed:

- i for repairs or maintenance of a house if it does not affect the exterior design;
- ii for minor improvements, such as painting a house or replacing windows;

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- iii for internal alterations;
- iv for the insertion of windows, skylights or roof lights but, to create a new bay window, will be treated as an extension of the house.
- v For the installation of solar panels which do not project significantly beyond the roof slope; and
- vi To re-roof a house (but additions to the roof are treated as extensions to the house).

6.9 A GUIDE FOR BUSINESS

6.9.1 The Need to Apply for Planning Permission.

Planning permission is not always required, generally speaking, for changes to the inside of buildings, or for small alterations to the outside such as the installation of telephone connections and alarm boxes. Other small changes, for example putting up walls and fences below a certain height, have a general planning permission for which a specific application is not required.

6.9.2 Obtaining Advice on Whether Permission is Needed.

Please check informally with the local planning authority whether a proposed development needs planning permission.

6.9.3 Working from Home

Planning permission is not necessarily needed to work from home. The key test is whether the overall character of the dwelling will change as a result of the business. If the answer to any of the following questions is "yes", then permission will probably be needed:

- i Will the home be no longer used mainly as a private residence?
- ii Will the business result in a marked rise in traffic or people calling?
- iii Will the business involve any activities unusual in a residential area?
- iv Will the business disturb neighbours at unreasonable hours or create other forms of nuisance such as noise or smells?

Whatever business is carried out from a home, whether it involves using part of it as a bed-sit or for "bed and breakfast" accommodation, using a room as a personal office, providing a child minding service, using rooms for hairdressing, dressmaking or music teaching, or using buildings in the garden for repairing of cars or storing goods connected with a business the key test is: is it still mainly a home or has it become business premises?

6.10 CHANGING THE USE OF PREMISES

In many cases, a change of use of a building or land does not require planning permission. For example, greengrocer's can be changed to a shoe shop without permission. Planning permission is not required when both the present and proposed uses fall within the same "class" as defined in the Development Order. It is also possible to change uses between some classes without making an application. Details are given in the Use Classes Order attached at 6.14 of this chapter.

Before negotiating a lease or buying a property, it may be advisable to consider whether planning permission is needed for the intended use and if so the chances of getting it.

6.11 FLATS OVER SHOPS

A space over a shop (and certain other premises with a display window), or over a ground floor office, may be converted into a single flat without putting in a planning application, provided the following is true:

- i The space is in the same use class, to start with, as the shop or office (either Class I or 2);
- ii The space is not in a separate planning unit from the shop;
- iii The outside appearance of the building will not change; and
- iv If there is a display window at ground floor level, it will not incorporate any of the ground floor into the flat.

6.12 EXTENDING EXISTING PREMISES

Minor extensions, including the erection of additional buildings within the curtilage, may not need a planning application because the development is already permitted under a Schedule of the Town and Country Planning Development Order.

6.13 BUILDING NEW PREMISES

The construction of new premises nearly always needs an application for planning permission. The development plan in force for the relevant area (see Introduction) will give some indication of whether the proposal is likely to be acceptable. It is worth talking to the local planning authority before submitting an application. If there are difficulties, officers may be able to suggest ways to make the proposal more acceptable. However, they cannot guarantee that planning permission will be granted.

6.14 Use Classes Order

The following classes of use are set out in the Development Order.

6.14.1 Class I – Shop

Use for all or any of the following purposes:-

- i for all the retail sale of goods other than hot food;
- ii as a post office;
- iii for the sale of tickets or as a travel agency
- iv for the sale of sandwiches or other cold food for consumption off the premises;
- v for hairdressing;
- vi for the direction of funerals;
- v for the display of goods for sale;
- vii for the hiring out of domestic or personal goods or articles;
- viii for the washing or cleaning of clothes or fabrics on the premises;
- ix for the reception of goods to be washed, cleaned or repaired where the sale, display or services is to visiting members of the public.

6.14.2 Class 2 – Financial and Professional Services

Use for the provision of:-

- i financial services; or
- ii professional services (other than health or medical services); or
- iii any other services (including use as a betting office) that it is appropriate to provide in a shopping area where the services are provided principally to visiting members of the public.

6.14.3 Class 3 – Food and Drink

Use for the sale of food or drink for consumption on the premises or of hot food for consumption off the premises.

6.14.4 Class 4 – Business

Use for all or any of the following purposes:-

- i as an office other than use within Class 2 (financial and professional services);
- ii for research and development of products or processes; or
- iii for any industrial process being a use which can be carried out in any residential area without detriment to the amenity of that area by reason of noise, vibration, smell, fumes, smoke, rust, ash, dust or grit.

6.14.5 Class 5 – Storage or distribution

i Use of storage or as a distribution centre.

6.14.6 Class 6 – Hotels

i Use as a hotel or as a boarding or guest house where, in each case, no significant element of care is provided.

6.14.7 Class 7 – Residential Institutions

i Use of the provision of residential accommodation and care for people in need of care;

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- ii Uses as a hospital or nursing home;
- iii Uses as a residential school, college or training centre;

6.14.8 Class 8 – Dwelling house

Use as a dwelling house (whether or not as a sole or main residence)

- i By a single person or by people living together as a family; or
- ii By not more than 6 residents living together as a single household (including a household where care is provided for residents)

6.14.9 Class 9 – Non-Residential Institutions

Any use not including a residential use

- i for the provision of any medical or health services except the use of premises attached to the residence of the consultant or practitioner;
- ii as a crèche, day nursery or day centre;
- iii provision of education;
- iv for display of records of art (otherwise than for sale or hire)
- v as a museum;
- vi as a public library or public reading room;
- vii as a public hall or exhibition hall;
- viii for, or in connection with, public worship or religious instruction

6.14.10 Class 10 – Assembly and Leisure

Use as

- i an art gallery (otherwise than for business purposes);
- ii concert hall, social centre or a community centre;
- iii cinema, music hall;

iv a dance hall, swimming bath, gymnasium or for other indoor or outdoor sports or recreation, not involving motorized vehicles or firearms.

6.15 CHANGES OF USE REQUIRING A PLANNING APPLICATION

Applications for planning permission are always required for material changes of use involving amusement centres, theatres, scrap yards, petrol filling stations, car showrooms, taxi and car hire businesses, hostels, and dry cleaning operations.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 7

RURAL AND HILLSIDE DEVELOPMENT

7.0 RURAL DEVELOPMENT

Agricultural growth is important in rural development as it generates employment and spreads the benefits throughout the rural community but it is not the only source of growth. In some areas natural and cultural resources such as tourist sites or mineral deposits exist and may be the only resources with which the areas are endowed. The importance of these non-agricultural activities will therefore mean new directions for rural development. The planning and implementation of rural infrastructure including roads, water, electricity must also play an important role in rural development.

Several pieces of legislation pertaining to rural development exist but the Town and Country Planning Act and the Local Improvements Act are the two that guide planning and development in the rural areas. Within the ambit of these legislation the growth of communities will be guided:

- i through the development of agriculture by the protection of good agricultural lands,
- ii by establishing appropriate manufacturing activities in selected rural centres,
- iii through the efficient exploitation of mineral resources,
- iv through alternative tourism options such as eco-tourism, heritage tourism, and community based tourism which should transform small towns and villages into centres of vitality and interest.

7.1 LOCAL SUSTAINABLE PARISH PLANS

The approach to rural development is based upon the use of policies and facilities that exist within the ambits of present laws and other related mechanisms. Local Sustainable Parish Plans where available will be used as instruments to guide policies and implementation.

These will ensure that:

i The use of arable land is rationalised and only temporary housing

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for agricultural workers is allowed on good agricultural land.

- ii Where good agricultural land will be jeopardized by the establishment of housing on poor agricultural land, permission is not granted for such development.
- iii Intensive agriculture such as pig and poultry rearing which does not need soil of good capability is encouraged on poor agricultural land.
- iv Where local raw materials are available, the establishment of industrial areas will be supported.
- v The establishment of shopping areas in growth centres will be encouraged to rationalize their distribution.
- vi Single family housing will be allowed in villages to satisfy local demand.
- vii Where communities have to be relocated such as in mining areas they are placed near to existing established communities.
- viii The conversion of buildings of historic and architectural importance to provide accommodation for new business services will be encouraged if this is necessary to preserve the life of the building.
- ix Redundant farm buildings may be used for economic generating activities such as restaurants and other tourist related facilities.
- x Areas of outstanding natural beauty will be protected and enhanced at all times.
- xi No permission will be given for development that will in anyway sterilize or render known mineral deposits unworkable.
- xii The country's mineral resources are conserved through efficient exploitation in a sustainable manner.
- xiii The planning authorities will ensure, through zoning and other methods, that mined out bauxite lands are used productively.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

7.2 HILLSIDE DEVELOPMENT

7.2.1 Guidelines

Any uncontrolled development on a hillside is a potential hazard as it increases the area of susceptibility of slope failure, erosion and drainage problems. In an effort to protect the stability of these environmentally sensitive areas, control has to be exercised over development proposals to prevent the destruction of trees and the construction of hard paving that contribute to excess runoff, flooding etc.

7.2.2 Application for Hillside Development

A developer is therefore required to submit the following information with any application for hillside development. This is to ensure that the design of the proposal will not affect the stability of the land.

- i A description of the physical environment of the project area including all natural and built features.
- ii A detailed description of the project from inception to operational stage.
- iii A grading plan and detailed cross sections indicating the extent of the proposed earthworks and features designed to ensure slope stability. This should include roads, parks and the ground floor of all buildings.
- iv A geological report which includes rock types and characteristics.
- A soil test report by an experienced geological and soils engineer showing
 - A geological profile;
 - Load bearing capacity;
 - Frictional resistance;
 - Water content;
 - Recommendations for soil stability.
- vi Details of the proposed drainage system of the site and the means of disposal of surface run off.
- vii Proposals for on-site erosion control.

- During the period of development
- And after completion of development

7.3 SITE PLANNING CONSIDERATIONS

In preparing the land for development the following considerations should be adopted.

- i Only areas absolutely essential for construction should be disturbed.
- ii A minimum of fifty percent of the existing vegetative cover and trees are to be preserved and the area should be properly landscaped.
- iii The trees, shrubs, and grasses, which will be affected by construction should be removed in phases.
- iv All natural water courses are to be preserved. Where it is proposed to divert a natural water course the proposed work should not affect lands through which the water course runs and which are presently drained by it.
- v Drainage channels are to be constructed prior to disturbance of the land which is to be drained.
- vi During the construction stage, trees and vegetation must be removed in stages and soil cover must be carefully stored for eventual replacement.
- vii Anti-erosion devices are to be installed where required. The devices are to be designed and constructed to the satisfaction of the local authorities.
- viii The design of the lot should conform as much as possible to the natural contours of the land in order to minimize the amount of land disturbance, to reduce the cost of cut and fill and the construction of retaining walls.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 8

TYPES OF PLANNING / DEVELOPMENT APPLICATIONS

8.0 **PLANNING APPROVALS**

Applications requiring planning permission are to be made to the local planning authority on a form provided by the local planning authority for the purpose and be accompanied by the necessary drawings illustrating the development. The planning authority may grant permission with or without conditions or refuse the application.

8.1 NRCA PERMITS/LICENCES

Where the provisions of Section 9 of the NRCA Act apply in respect of a development which is the subject of an application to the local planning authority, planning permission shall not be granted unless an application has been made to the Natural Resources Conservation Authority (NRCA)/National Environment and Planning Agency (NEPA) as required by the above provisions and this Agency has to grant or signify in writing its intention to grant a permit for the development before planning permission can be granted.

8.2 **DEVELOPMENT ORDER PROVISIONS**

In dealing with applications the planning authorities should have regard to the provisions of the development order as far as material thereto and to any other material considerations. The development order is therefore the most important policy document in the determination of planning applications and should be adhered to although the weight to be given to it can vary in circumstances. If the policies are not up-to-date or are not current and are overtaken by the events in exceptional circumstances these would be material considerations.

8.2.1 Planning Conditions

Planning authorities have wide powers to impose planning conditions on detailed applications under the Act. They can impose conditions to:

- i Regulate the use of land under the control of the applicant even if it is outside the application site.
- ii Grant permission for a temporary period only.

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iii Impose time limit on the commencement of development.

8.3 **Types of Applications**

The types of applications that fall under the powers of the planning authorities are:-

8.3.1 Full / Detailed application

A full or detailed application is one in which the developer without any reservation seeks outright planning permission for his development. The application forms along with the requisite plans are submitted to the local planning authority. If the information supplied is not sufficient to allow the authorities to deal with the application further information may be requested. The time period for processing begins with the receipt of the additional information.

Applications should be processed within 90 days of receipt of such application or the applicant can appeal to the Minister as if his application was refused. The applicant can also appeal to the Minister if an application is refused or granted with conditions not to his liking. A time period may be placed on the commencement of development (two (2) years).

8.3.2 Retention of building (Retroactive Planning Permission)

The planning authorities can grant permission for the retention on land of any building or works constructed or carried out before the date of the application, or for the continuance of any use of land instituted before that date. Such permission may be granted to take effect from the date on which the building or works were constructed or carried out, or the use was instituted.

8.4 **RETENTION OF BUILDING, CHANGE OF USE, TEMPORARY PERMISSION**

8.4.1 General Requirements

The Superintendent of Roads and Works/City Engineer of the Parish Councils/K.S.A.C. are responsible for the control of the engineering and structure of buildings, roads and streets in accordance with regulations under the respective Building Acts. The National Works Agency (NWA) comments on development which affects main roads and keeps one copy of the proposal for their records.

8.5 NEPA's ROLE

The National Environment and Planning Agency (NEPA) is normally asked for comments if the proposal is for a development other than a single family residence, (commercial, office, multi-storey, industrial, etc.). However, plans for single family residence located on a main road should also be submitted. The Agency keeps one copy of the plans for its records.

8.6 INFORMATION REQUIRED

The following six (6) sets of drawings are required, unless otherwise stated:-

- i Application forms (in duplicate) or as required by the Local Planning Authority
- ii Subdivision approval where this is necessary (1 copy)
- iii Outline planning approval if this was obtained previously (1 copy)
- iv Documentary evidence of land ownership (1 copy)
- v Location plan at a scale of 1:12,500
- vi Site plan at an appropriate scale showing ingress and egress, parking layout, plot boundaries, sewage lines, building lines, north point and any physical factors affecting the site
- vii Detailed construction drawings i.e. plans, sections, elevations, plumbing layout and electrical layout to a scale of 1:50, 1:100 or 1:200.
- viii Soil test report where major projects are contemplated (1 copy)

8.7 COASTAL DEVELOPMENT

Where the development is along the coastline, instead of six (6) copies, eight (8) should be provided in cases of dwelling houses, only three (3) copies of the plans are required. However, if the house is along the coastline, an additional two (2) are required.

A copy of the application form on which development applications should be made is shown in Appendix 2.

8.8 **DETERMINATION**

A person who is desirous of carrying out any operations on land or make any change in the use of land or building and wishes to have it determined whether or not this would constitute development and if so, whether or not an application for permission is required, can either as part of an application or without such application apply to the local planning authority to have the question determined.

The provisions that apply to full applications would apply in this instance for example the time period within which a response should be made, extension of the period for processing and appeal to the Minister.

8.8.1 **Documents Required**

Applications are to be submitted to the local planning authority that will process them; the authority will send a response to the applicant. Documents required are:

- i Completed development application form
- ii Location plans and address of proposal
- iii Four copies of layout plans and elevation of proposed changes
- iv Evidence that adjoining owners are aware of the intended change.

Completed application forms along with copies of site and building plans are to be submitted to the Secretary Manager of the relevant Parish Council, or the Town Clerk, Kingston and St. Andrew Corporation. The number of copies varies with circumstances, hence the Local Planning Authority should be consulted as to the requirements. The application form in duplicate, with about six copies of the plans is usually required. The plans are distributed to the various advisory agencies concerned for comments or for their records.

8.9 CHANGE OF USE

Under the Town and Country Planning Act, any material change of use of any building or any land requires planning permission. For example, if one is desirous of carrying on a non-residential activity in a residential area, then it would be necessary to obtain a change of use from the Town and Country Planning Authority. The same principle applies to other uses which are to be located in areas which are not zoned for those purposes in a development order, except for the limitations contained in the Use Classes Order.

8.10 TEMPORARY PERMISSION

Temporary permission may be granted for a development for a limited period only. The applicant is required to remove the authorized building or works, or revert to the previous use of land at the end of the specified period.

8.11 OUTLINE APPLICATION

Either before an individual buys land or before the costs of preparing detailed plans are incurred, a developer may wish to know if the principle of the proposed development will be likely to get planning permission. An outline application for permission to erect buildings may be made and permission may be given subject to the authority's subsequent approval of the siting, design or external appearance of the buildings, or the means of access thereto or landscaping, in which case particulars and plans in regard to these matters are not required when submitting the application.

The planning authority can decline to deal with an outline application proposal and request the submission of further details if it thinks fit to do so. The applicant may furnish the information so required or appeal to the Minister under Section 13 of the Town and Country Planning Act within 28 days of receiving such notice or such longer period as the Minister may allow, as if his application had been refused by the planning authority. These applications may be subject to a time limit on the submission for approval of the reserved matters. Failure to comply could result in the outline permission lapsing.

8.12 SUMMARY

- i An outline planning permission is in effect the grant of planning permission;
- ii Once outline permission is granted a planning authority can only refuse detailed consent on the basis of the things contained in the reserved matters;
- iii The local planning authority has the power to decline to consider an application in outline form and request the details;
- iv Outline permission for operational developments are deemed to be granted subject to the following conditions:-
 - That application for approval of reserved matters be made within a specific time period imposed by the planning authorities;

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• That the development itself should commence within two (2) years of the approval of the reserved matters.

8.12.1 Statutory Reserved Matters

Statutory reserved matters are restricted to:

- siting
- appearance
- landscaping
- access
- design

It is very important to submit the correct application when applying for reserved matters as if the wrong information is submitted it could be considered as a new application. This could be costly for the applicant. The applications should:

- be in writing (or on the form provided);
- contain details of the outline planning permission;
- include such plans and drawings as are necessary to deal with the reserved matters, example site plan, layout plan, elevations and sections;
- not differ in substance from the development proposal approved in the outline application or else it could be considered a new application.

8.13 ENQUIRY

An enquiry can be made to the Chief Executive Officer of the National Environment and Planning Agency (NEPA) or the local planning authority prior to making a full application to determine if:-

- i The erection and/or alteration of a building; or the
- ii Change of use of any building or land would be feasible for a particular site and what initial concerns, if any, are there with respect to the application.

8.13.1 Information Required

The enquiry should be made in writing and should contain the following:-

- Address of the property
- Location
- Area of land
- Form and type of development being proposed.

8.13.2 Benefits of Enquiry

The process enables the applicant or developer to be advised about:-

- Any planning conditions that would be imposed on the proposal
- The land use zoning; and
- Any policies which might affect the property

The response to an Enquiry is not legally binding on the planning authorities or the Chief Executive Officer, nor does it raise any claim of legitimate expectation on the part of the applicant. The Chief Executive Officer and the local planning authority shall be immune from any suit as a result of any reliance on the opinions offered. This should be made clear to the applicant to prevent any legal problems from arising.

8.14 FLOW CHART INCLUDING TIMELINE FOR DEVELOPMENT APPLICATION

Development applications are to be submitted in writing on the form supplied for that purpose to the local planning authority/KSAC.

Usually the application is sent to NEPA who will undertake the circulation and collection of the comments from relevant agencies and send them along with their own advice to the Parish Council/KSAC or to the Authority. Where an application is outside the "called-in" area and has not been sent to NEPA then the local planning authority will have to do the co-ordination and circulation. A flow chart is attached as Appendix 1.

8.15 PLANNING STANDARDS AND GUIDELINES FOR DIFFERENT TYPES OF DEVELOPMENT.

Site evaluations and selection factors (Residential Developments)

Before acquiring land for new developments or to subdivide for residential

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purposes the development potential of the site should be evaluated.

This is necessary as the developer may be faced with the need to consider what land is available for the particular type of development he wishes to undertake and which alternative site he would prefer to use.

Such assessment should be done with the assistance of a development professional such as a planner, architect or engineer. In making an evaluation the following criteria should be considered:

- i National Settlement Strategy
- ii Zoning policy, regulations and standards in the development order
- iii Market demand
- iv The area of the site
- v Its position relative to other developments
- vi The transportation system in relation to the site
- vii The availability of utilities
- viii The availability of social amenities

8.15.1 The National Settlement Strategy

Provides the spatial framework for future urban development and is part of the methodology for achieving a rational pattern of land use and community development. It seeks to concentrate people, social and infrastructural services and economic activities in a manner which will place basic services within the reach of most people at minimum cost while making for efficiency in land use. The general technique is to promote centres which service people within a certain range. They are ranked from district centres to regional centres. Developers should be cognizant of this policy as it will assist them to determine where investment can be most productive.

8.15.2 Zoning Regulations

Zoning Regulations direct where specific developments may take place. Where there is no development order or specific zoning regulations, development should conform with Government's physical planning policy. Guidance with respect to this matter can be given by the Town and Country Planning Authority, NEPA, the KSAC or the local authorities.

8.15.3 Market Demand

The market demand for development projects will be established through

investigations, but care needs to be taken when choosing a site. Some sites may be more attractive because they are easier to reach by a larger number of people, or the surrounding area may simply be more attractive in itself. Attraction for whatever reason, can be an important consideration when trying to evaluate between alternative sites for development.

8.15.4 Area of the site

The size of the site required by different developers will vary according to the type of development proposed. The area required for housing will depend not only on the size and number of units, but also on the densities permitted in the area.

8.15.5 **Position relative to other development**

A preferred housing site would normally be positioned in a pleasant environment, near other housing and is conveniently located in relation to work, shopping, schools and entertainment.

8.15.6 Transportation System

Good road communications and nearness to bus and taxi routes are key factors in selecting a site for housing, especially if it is on the periphery of a town. If a rail system is available then this should be easily accessible, by bus or taxi service as well as private motor vehicle.

8.15.7 The Physical characteristics of the site

Other things being equal, the flatter the site, the easier and less costly it is to develop. Undulating land with porous subsoil will usually attract a housing developer who builds lower cost units. In general, developers prefer to avoid sites on which it is difficult to carry out works because of the time and costs involved.

The shape of the site although to a lesser extent also influences its selection. It is not necessary for a housing site to be of regular shape since the units are usually small and can be adapted easily to a site with irregular boundaries.

8.15.8 The availability of Public Utilities

All developers will require public utility services such as electricity, water and telephone (to a lesser extent), to be made available to their sites.

Developers should therefore make arrangement with the providers of these services to make them available on a timely basis.

8.15.9 Social Amenities

Conditions of approval with respect to large housing developments will require that adequate space be not only reserved for certain basic social amenities, but should be developed and/or constructed simultaneously with the housing units.

In the case of large scale housing developments in excess of 500 units within a new area, or on the outskirts of an existing settlement where the basic social facilities such as primary schools, health centres, community centres, etc., do not exist or are inadequate, the developer at his own expense should provide these within a specified time. The relevant government agency with responsibility for the facility must be consulted. Steps should be taken to ensure that the provisions of community facilities fit into the government agencies' overall plans for the area and that designs meet with the approval of the relevant agencies. If these services cannot be provided, the application will be considered premature.

Where such developments are proposed within an existing built-up area and services are assessed as being inadequate, then the relevant government agency would be required to provide additional basic amenities as necessary.

8.15.10 Conditions of Approval

When planning permission has been granted for the development, the conditions attached to it should be checked as they could have an impact on the design and layout of the site. They could:

- i Restrict frontage development, depending on how busy the road is;
- ii Restrict points of access into the site;
- iii Require a certain number of car parking spaces;
- iv Restrict how close buildings may go to the boundaries of the site;
- Specify the number of habitable rooms and ground coverage that may be permitted;
- vi Restrict the height of the building;
- vii Restrict aspects of the design of the building themselves.

If planning permission has not been granted it would be important to know that the principle of development is acceptable. It would also be beneficial

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to check the planning register to see if there was any earlier permission and if any conditions were imposed, since these could have a bearing on subsequent applications.

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CHAPTER 9

RESIDENTIAL DEVELOPMENTS - SINGLE FAMILY HOUSES

9.0 SINGLE FAMILY DETACHED

9.0.1 Guidelines

In assessing residential developments the following guidelines will apply to ensure proper planning and sustainable development:

- i The need to ensure a high standard of residential layout which can create high quality living environments;
- ii The provision of quality and quantity of communal open space in developments and adequate private space around dwellings;
- iii Provisions relating to building lines, building heights and other design criteria;
- iv Requirement to retain existing vegetation such as trees where appropriate.

9.1 DESIGN CRITERIA

The successful design of such development will depend on a coherent and unambiguous set of guidelines, standards, etc. (see Figs. 14 &15).

In new developments direct access from individual houses to main collector roads will not be encouraged. A service road should be provided for this purpose.

9.1.1 Vehicular Movement

Vehicular movement should be made convenient and safe by:

- i Constructing the minimum size, alignment and standard of roads necessary for the traffic they are intended to carry.
- ii Application of techniques which reduce the volume and speed of traffic where access roads serve several buildings.
- iii Use of culls-de-sac where appropriate.

- iv Careful design to avoid through traffic movements.
- v Where feasible provide direct links to play spaces, schools, etc.

9.1.2 Garages

Garages should not extend in front of the established building line.

9.1.3 New Development

New development or extensions should not result in significant loss of daylight or overshadowing of any habitable or useable room within a neighbouring building.

9.1.4 Conversion of Single Family Dwelling Houses

The conversion of single family dwelling houses to other uses will not be supported except in special circumstances. Mixed uses will however, be encouraged where the use is part of the original development.

Single family residences will be allowed in areas earmarked for the purpose in the development order, or development plans, or in communities where people wish to remain.

The conversion of single-family houses into apartments is a material change of use for which planning permission is required.

9.1.5 Housing Schemes

There should be a variety in design, dwelling type and size in housing schemes to enhance the visual attractiveness of the proposed development and to cater to different household sizes.

Buildings suitable to providing a service to the residents such as childcare facility and house shops, should be included as part of the development.

All services such as electricity, telephones and cable should be located underground in new developments, where this is possible.

9.2 FAMILY FLAT

The creation of a family flat, (generically referred to as granny flat) to be occupied by a member of the occupant's family is generally acceptable, provided it is not a

separate detached unit, it is possible to provide direct access to the remainder of the house and the land space is adequate to accommodate it. The flat should not be let or sold, other than as part of the overall property and shall revert to being part of the original house when no longer occupied by the family member. The design should ensure that the flat forms an integral part of the main dwelling unit capable of reintegration for single family use.

9.3 DORMERS

Dormers should not obscure the main features of the existing roof. They should:

- i Be well below the ridgeline of the roof;
- ii Be drawn well back from the eaves;
- iii Not extend the full width of the roof;
- iv Relate to the windows in character, proportion and alignment;
- v Be finished to match the materials of the existing roof.

9.4 STANDARDS

9.4.1 Density

- i The density of residential development will depend on the area in which it is located, satisfactory arrangements for the disposal of sewage and the general amenities available in the area.
- ii Within the main urban and suburban areas with developed amenities, lot areas should not be less than 279 square metres for internal lots and 372 square metres for corner lots.
- iii Where the amenities are not developed the lot sizes should be a minimum of :
 - 557 square metres in sub-urban areas;
 - 743 square metres in rural towns;
 - 0.1 hectare (1,089 square metres) in rural areas.
 - The minimum lot sizes may be reduced for housing schemes in special areas and for starter homes where the layout indicates that this can be done without being hazardous to the general environment.

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iv All houses should have an area of private open space, inclusive of car parking to the rear of the building line (see Fig.2). Minimum rear garden size and side set backs shall be as set out under "setbacks".

9.4.2 Use Class

In the use classes in a development order, single-family residence falls in the category of "Dwelling Houses" and one in which not more than 6 residents living together form a household where care can be provided for the residents.

9.4.3 Access

All single family detached or semi-detached houses should have access on to a public thoroughfare. This could be by means of footpaths and walkways as well as directly on service roads designed for the purpose. Access to buildings on corner lots should be at least 9 metres from the intersection and should generally not exceed 3.6 metres in width. Where possible access should be grouped to limit the number of access points on the roadway.

Where backlands development is permitted, the access should be coordinated with that for the existing building and have sufficient width, length and construction to ensure that adequate provision is made for vehicles. Vehicular circulation throughout the development should be designed so as to be easily understandable in terms of its function.

9.4.4 Height

The height of buildings should not usually exceed two floors from ground level. Basement and other related activities may however, be located below the designated ground level.(see Figs.3 & 4). Attics will be supported where the design of the building is in character with the neighbourhood. Notwithstanding the above however, the maximum permissible height will be determined by the local planning authority after considering the location of the site, height of adjoining developments, scale, mass or bulk. The use of varying building heights will be considered where appropriate.

9.4.5 Setbacks

Buildings should be set back from lot boundaries so as to afford space for maintenance, to create privacy and to allow sufficient space for natural light

and air to penetrate all windows and to provide useful outdoor living and amenity spaces.

- i Front yards should be a minimum of 4.6 metres from property boundary.
- ii Rear yards, where provided should not be less than 3.60 metres measured from the nearest point of the main wall of the building to the property boundary.
- iii Side yards, where provided should not be less than 1 metre from property boundary to the nearest projection of the building. This distance should be increased by 0.6 metre per floor for buildings in excess of one storey.

Where necessary, such as along important traffic routes or where road widening is needed for existing roads, a greater set back may be required.

9.4.6 Parking

The parking requirement for a residence of up to two (2) bedrooms is one (1) space for each individual unit. For residences of three (3) bedrooms and over 2 spaces for each individual unit will be required. Parking should be provided on site or in a shared parking area or bay integrated into the overall development, or provided on-street where road/widths are developed to accommodate it. No more than ten (10) spaces should be provided in a shared parking cluster in the interest of visual amenity, and consideration will be given to the visibility of residents' cars from their homes, convenience and the need to soften the impact of group parking by landscaping.

9.4.7 Open Space

The open space provided should be accessible on foot from every dwelling served without having to cross any road with a peak traffic flow greater than 30 vehicles per hour. The space should be functionally accessible from any dwelling served and should be overlooked by as many dwellings as possible and public ways. These spaces are to be developed as part of the overall development. Further development, improvement and maintenance will be the joint responsibility of the owners/occupiers of the development scheme.

Areas designated for public open spaces, should be fenced off prior to the commencement of any development works on site and should not be used

as a site construction compound and other related activities.

In addition to the main public open space, there is a role for a range of smaller ones catering to young children, the elderly and the handicapped. Public open space corridors should provide for interconnected, safe and secure pedestrian movement.

Open space should be provided at the rate of 1 hectare per 100 dwelling lots.

9.4.8 Landscaping

- i Building and road layouts especially in rural areas should allow for structure which safeguards natural landscape features and habitats.
- ii Where appropriate, significant natural site features such as stand of trees, stream or rock outcrop should be incorporated as an integral part of the proposal.
- iii Landscaping should provide buffer zones between new and existing development and between different use zones within a large site.
- iv Residential properties should not only erect walls to screen buildings from the road and to obtain privacy but should also use hedgerows in this regard.
- v The use of hard landscaping elements such as paving, cobbled areas, etc., should play an important role in the design of landscape concepts.
- vi All landscaped areas containing trees shall have a minimum area of 4.6m2 and a minimum width of 1.5m.
- vii All landscaped areas shall be planted with grass or an acceptable ground cover or material.

9.4.9 Drainage

All residential schemes must include proper drainage plans for collection and acceptable disposal. Downstream effects must also be taken into consideration. Because of the cumulative effect on downstream change facilities, developers of new schemes may be required to contribute to the

expansion of these facilities if necessary.

All residential properties are required to dispose of storm water runoff from roofs and buildings, into drains provided, on their property or under the sidewalk. No permission will be given for such storm water run off to be disposed of on the surface of the sidewalk or on another person's site.

9.4.10 Site Planning Considerations

- i Privacy defined as freedom from undue observation is an essential feature in residential layouts. Privacy can be ensured by attention to the alignment of residential buildings and their relationship to each other. Good design in housing layouts, the configuration of the houses and their relationship to each other, to roads, etc. should aim to provide layouts with adequate screening so as to achieve freedom from observation.
- ii The maximum plot coverage for single family residential development shall be 50 per cent of the site area.
- iii No part of any building should project beyond the established building lines except that the following projections may be permitted within the lot boundaries in special cases:
 - Upper storeys (minimum 3.0 metres above ground) 1.8 metres maximum beyond building line provided that such projections do not interfere with the planting of trees.
 - Open fire escape 1.8 metres into side or rear yards.
 - Eaves, awnings, sun canopies 2.4 metres maximum beyond building line.
 - Uncovered steps and porches I metre maximum beyond building lines.
- iv The design and layout of extensions should have regard to the amenities of adjoining property as regards to daylight and privacy. They should not obstruct a neighbour's view, overshadow windows, gardens or yards, or reduce a neighbour's privacy.
- v Extension to the side of a house should not be forward of the existing building so that it can give a more satisfactory appearance.

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Single storey extensions should be at least 2.0 metres between it and neighbouring buildings in order to prevent dwellings that were intended to be detached from becoming a terrace and to facilitate access to the rear of the dwelling.

- vi Single family detached houses with gates should avoid them opening outward where possible, as this will obstruct the movements of pedestrians.
- vii Applications for housing development on unserviced and unzoned lands in the Development Order area may be regarded as premature.
- viii Screen walls 1.5 metres high (maximum) should be provided where the boundaries of house sites abut roads, pedestrian ways, or open spaces and where the areas of private open space are below the recommended standards. The walls should be rendered.
- ix Open plan front gardens are only recommended where a high level of safety can be achieved such as in gated communities and will not be recommended on main access roads.
- x A minimum of 22 metres separation distance is required between first floor opposing windows. Where this is not feasible a reduced distance may be considered but the rooms should be so designed as to avoid overlooking.
- xi A large residential development should have a variation in character between different parts, which should not be based solely on development density but on different types of space, building forms and materials.
- x Where balconies are provided, they should be useable and not be for decorative purposes only.
- xi Where sewerage infrastructure is privately provided the type and design shall be in compliance with the standards set by the NWC, MOH Environmental Health Unit, NRCA, and should conform with the proper planning and sustainable development of the area and public health standards.

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9.5 **APPLICATION FORMS**

Single family detached residential development requires planning permission if it is located in a Development Order area. Outside of the order area building permission will be required from the local authority. In the former case, applications should be made to the local planning authority on the form provided for full applications. An outline application could also be made but the scale of development would not warrant such a task. Where building permission only is required then the application should be directed to the local authority and the necessary fees paid for processing. The information to be submitted with the application form is given under detailed applications.

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CHAPTER 10

RESIDENTIAL MULTI-FAMILY DEVELOPMENT

10.0 MULTI-FAMILY DEVELOPMENT

This type of development applies to town houses, row houses, or other forms of grouping of similar units.

I0.0.1 Guidelines

The following guidelines apply to these types of residential development:

- i Housing falling in this category is usually a planned development having a high standard of layout, design and amenity. The plans should preferably be prepared by professionals recognised by the KSAC and the planning authorities (see Chapter I—Use of Professional Service).
- ii Densities are normally higher than those for single family detached or semi-detached houses but lower than those for apartments.
- iii They are usually located in areas zoned for the purpose or as infill in residential areas.
- iv On sites of infill, it will not only be necessary to meet the criteria for new housing development but also to ensure that the new development is integrated into the existing development in terms of physical layout, size and materials.
- v Yard in relation to this type of development represents the outdoor area adjacent to a dwelling unit located at or above ground level. The sum of the minimum yard depths for any two rooms facing each other would be the minimum allowable distance between the two dwelling units.
- vi Certain yards require an area of privacy either for the outdoor use of the occupants of a particular unit or to provide privacy from passers-by and are known as the "privacy zone". The remainder of the yard where no privacy zone is required may be used for communal pedestrian purposes by the occupants of the project. (See Fig. 1).

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vii The yard depth and privacy zone requirements may vary depending upon the form of housing and on the use of the rooms having principal windows overlooking the yard.

10.1 STANDARDS

- i Normally the maximum density allowed is thirty (30) habitable rooms per acre (75 h.r.p.a).
- The height of an infill building is not to exceed two (2) storeys.
 However, three (3) storeys may be permitted in situations where the design would allow it.
- iii The minimum plot area required for the development of a scheme is 0.2 ha.
- iv Town houses will only be allowed as infill in cases where it can be demonstrated that the privacy and visual amenities enjoyed by existing occupants remain unaffected and the design of the building is in character with the area (visual amenities relate to such matters as outlook, over-shadowing, reasonable protection from overlooking, etc.).
- v It may be necessary to impose standards higher than those normally required to reduce the impact of such development.

10.2 PARKING

- i Car parking should normally be located at least 6.1 metres from any window to a habitable room at or below ground level.
- ii Parking spaces should be provided within the curtilage of each dwelling and clear of the highway, or in a car park provided to serve the development.
- iii Motor vehicles should where convenient, discharge into its own access way and not directly on to main roads.
- iv Parking should be provided at the rate set out in the "Parking and Loading Requirements", and the bays in conformity with the design shown in Figs. 7-12 & 16-19).
- v Parking should be provided for people with disabilities as per the requirements in Figure 32.

10.2.1 Visitor parking spaces must be located either:

- Within a common parking area, or in
- Areas along service roads provided for the purpose;

10.3 OPEN SPACE.

Although each town house lot is supposed to have its own front and rear yard amenity space, there should also be a general amenity area for the whole development. This communal area will be calculated on a per habitable room basis as shown in the example in "Requirements" under Apartments. This commercial area must be developed as part of the overall development. There after it becomes the responsibility of the owner/occupier to further develop and maintain these commercial areas and commercial facilities.

10.4 LANDSCAPING

- i The front portion of the lots where they are visible from public streets and also all plots reserved for open space and recreational areas, should be landscaped.
- ii Landscaping should include lawn, shrubs, hedges trees or other acceptable material, plants or otherwise which may be used as a visual medium.
- iii Landscaping should be should be handed over in good condition so as to present, a healthy, neat and orderly appearance;
- iv In instances where meaningful plant material exists on a site, prior to development, this should be preserved and used to landscape the area.
- v Shrubs and hedges should be planted so that they form a continuous screen (0.76m centre is recommended).

10.5 SITE PLANNING CONSIDERATIONS

10.5.1 Density

For development of 3 - 75 habitation rooms per hectare, the floor area ratio should be 0.33, the plot coverage 33 1/3% and the minimum green

space within the net plot area being 45 percent.

It is not necessary that all the developments should meet the floor area ratio level indicated, as this is a maximum and not a minimum..

10.5.2 Water and Sewage

Provision of potable water and sewage facilities should be to the satisfaction of the Environmental Health Unit within the Ministry of Health and the National Water Commission.

10.5.3 Drainage

Surface drainage /storm water runoff should be to the satisfaction of the National Works Agency.

10.5.4 Parking

Proposals for blocks of flats should show adequate space (see Parking and Loading Requirements) for manoeuvring refuse collecting vehicles, separate from car parking spaces, if bin stores are provided more than 25 metres from the highway.

10.5.5 Design

- i Terrace or town houses should vary in size in the number of units per block to avoid visual monotony and should have convenient private individual access to the rear of each property.
- ii Where it is necessary to have access to utility lines at the rear of the buildings, an area 1.5 metre wide minimum running the full length of the block with access from a public area should be left for this purpose.
- iii In projects of more than five (5) attached units, the identity of the individual unit should be evident in the street elevation or facade.
- iv The use of balconies, overhangs, covered patios and trellis provides relief and contrast to the building and assists in breaking up large wall surfaces and should be used where possible.

CHAPTER II

RESIDENTIAL DEVELOPMENT APARTMENTS

II.0 STRATA DEVELOPMENT

A strata development is one in which the units in the building are located above each other, the roof of one unit being the floor of the one above, and having shared entrances and other essential facilities and services. A strata development is normally referred to as an apartment building.

II.I GUIDELINES

II.I.I Design Guidelines

Apartment or strata development should have a high quality of building design and site layout and have due regard to the character of the adjoining streetscape or landscape. They will normally be permitted in areas zoned for this type of housing in development orders or development plans.

They may be acceptable within single family housing developments when planned or constructed as part of such development. However, under other circumstances they will not be allowed where they have to gain access through single family residential neighbourhoods, destroying their amenities.

Yard when used in the context of this development has the same meaning as in Town House development. In considering applications for apartment development the height of buildings and the number of habitable rooms to the unit area will apply.

11.1.2 OTHER CRITERIA

The other criteria on which these applications will be assessed are:

- i General appearances;
- ii Distance to adjacent development;
- iii Established character of the area;
- iv Other technical factors and considerations.

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11.1.3 Density Guidelines

In areas where density guidelines have not been provided the following will be used as a guide in determining the density of development to be allowed in the area taking into consideration the need for sustainable development:

- i The ability of the proposed layout and design to offer a high quality living environment for residents;
- ii The capacity of the infrastructure including social and community facilities to absorb the demands created by the development;
- iii The extent to which the site may, due to its size, scale, location and density protect the established character and amenities of existing adjoining residential developments.
- iv The need for increased residential densities in appropriate locations.
- v Adequate car parking provisions including parking for the disabled.
- vi Overall, a variety of dwelling types and sizes should be included to enhance the attractiveness of the proposed development and to provide different household sizes.
- vii Where balconies are provided they should be such that it is possible to walk and sit on them.
- viii Any restrictions in title, rights of way, access use or light will significantly affect design and layout. They should be checked and removed before construction begins. In some instances they may be overcome through negotiations with beneficiaries.

II.2 STANDARDS

II.2.1 Density

Apartment development is guided by different densities depending on the area in which they are located. This falls within the range of 75 habitable rooms per hectare on the urban fringe to 375 habitable rooms per hectare within the core or town centre.

In most areas where this type of development is allowed the density is

guided by the level of infrastructure and amenities available such as sewer, water, etc., or where they can be easily and adequately provided. Where the land space is approximately 0.3 hectare, apartments can be located in residential areas as infill but should not exceed a density of 125 h.r.p.h. A significant consideration in this regard is the manner in which the land area can be used to site buildings adequately so that they do not interfere with the scale, amenities or visual qualities of existing developments.

II.2.2 Use Class

Apartment buildings fall within the classification of dwelling houses in the Development Order. Although they are not identified per se they are usually located in residential areas. However, due to the character of the building, permission for a change of use from single family to apartment is required.

II.2.3 Access

The heavy volume of traffic created by most apartment buildings justifies their location along roads assessed to accommodate that level of traffic. Road widening may be necessary in some cases where the capacity is not adequate.

Proper sidewalk facilities should be provided for pedestrians to avoid conflict with motor vehicles on the roadways. Vehicular ingress/egress/crossover should be from one point and be a minimum of 15 metres from any road intersection depending on the level of traffic being discharged.

The minimum width of a driveway should be 2.4m for single lane traffic and 5.4m for two way traffic.

Turn arounds should be provided on individual lots where possible and where access/egress is on collector roads. Walkways where provided should be a minimum of 1.5m for apartment in excess of three storeys and 1.2m for those two storeys in height.

11.2.4 Height

Where apartment buildings are located in residential areas as infills it will be necessary for them to have adequate open space in addition to parking space and tree screening so that a satisfactory transition from the scale of any neighbouring buildings of lower height may be achieved. In such

circumstances the height of the building should not exceed two floors. Otherwise the maximum height of buildings will be determined by the density. The general guide should be:

- i Two storeys in areas where the allowable density is 75 h.r.p.h.
- ii Three to four storeys in areas where the allowable density of development is 125 h.r.p.h.
- iii Five to six storeys in areas where the allowable density of development is 250 h.r.p.h.
- iv Seven to ten stories in areas where the allowable density of development is 375 h.r.p.h.
- v Over ten stories will be determined by the relevant authorities

II.2.5 Setbacks

The minimum distance between apartment buildings should be twice the height of the buildings measured on the side of the front (or back) elevation to a maximum of 21.0m. The minimum distance between two end elevations of two apartment buildings should be 1.0m plus 0.3m for each additional storey or partial storey at ground level to a maximum of 4.0m. This is not applicable if the end elevation has the only window of a habitable room. If so, the distance should be a minimum of 7.5m. Along either front or back elevation there should be a privacy zone of appropriate length.

The set back from the roadway will be guided by the height of the building and the width of the road but should not be less than 21.0m from the road centre line. For distances between buildings of different heights, the height of the highest one dictates the distance.

II.2.6 Amenities

Particular attention will be paid to the location of communal open space for the residents. It should not be overshadowed by the blocks and should be laid out in such a way that it can be easily maintained. Secluded sunny areas and shade should be provided by a careful choice of planting (see Fig. 13).

The amenities to be provided will be calculated on a habitable room basis as shown in the example under "Requirements".

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11.2.7 Parking

- i The parking provisions are set out under Parking and Loading and are normally required to be on site. The number of spaces to be provided will be calculated on the guidelines provided.
- ii Notwithstanding the above, parking spaces may however be also provided on a shared basis with other developments where their use do not overlap.
- iii Car parking areas shall normally be located at best 6.0 metres from any window to a habitable room at or below ground level to maintain adequate privacy.
- iv At least one (1) parking space should be provided for disabled driver, and be properly identified (see Chapter on Special Needs).
- v Parking areas for visitors should be clearly identified and be located between the block and road boundary or where it is easily accessible.
- vi Carports where provided should be constructed with compatible architectural treatment with other site elements including roof materials that match the main buildings.
- vii There should be a maximum of ten (10) covered or uncovered parking spaces between landscaped islands having a minimum width of 2.5 metres planted with a minimum of 0.6m high ornamental trees.

11.2.8 Landscaping

Landscaping is an integral part of most high density development proposals and therefore a landscaping plan should be submitted with the detailed proposals. A landscape evaluation of the site should be done.

The following factors should be considered:

- Prominence of site,
- Existing vegetation incorporating a tree survey,
- Topography,
- Site surroundings,
- Tree preservation,

Design:

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This should be analysed and developed into a design which should at least include the following:-

- Access
- Circulation
- Density of site
- Safety
- iii Trees and Shrubs:

Trees and shrubs when suitably selected and located provide protection from the sun and help to screen utility and parking areas and other disturbing factors such as noise pollution.

iv Visibility from roadways:

A significant part of the landscaping should therefore be located so as to be visible from the public roadways.

v Landscaping Parking Areas:

The following should be taken into consideration:

- Trees should be protected from destruction by motor vehicles.
- The interior of the parking lot shall include landscaping covering not less than 10 per cent of the total area of parking spaces. This should be additional to any buffer zone landscaping.
- Shrubs or other live planting material is encouraged to supplement the tree landscape.
- All parking lots of 15 spaces or more that abuts a public road or sidewalk shall provide a landscape buffer along the road. Berming is encouraged to provide screening of cars from sidewalks, roads, and adjacent residential areas. Shrubs should be planted a minimum of 1 metre apart. (see Figs. 16-19).
- Where possible climbing plants should be used to form a

green wall between two rows of cars or as a ceiling over the walls of buildings and on trellis work, concrete ballasts, etc., to add greenery to the surroundings.

vi Planning Permission and Landscaping:

Planning permission will not normally be given for detailed (full) applications if acceptable landscaping plans are not included. Only in exceptional circumstances will a condition be imposed which requires the later submission of landscape plans.

11.2.9 Drainage

Surface water from the roofs of buildings and car parking areas should be collected and channelled into landscaped areas of the premises to be percolated. Excess should be collected in drains coordinated with the level of the road pavement to prevent large flows of surface water across it and be directed into the nearest central drainage system.

11.2.10 Site Planning

- i No building or other permanent structure is to be erected within 12.0 metres of the centre line of a public road.
- ii A minimum of 3 metres wide perimeter area shall be contiguous to all side and rear property boundary lines adjacent to singlefamily zoned land. An additional 0.6 metre shall be added to this area for each storey beyond one of buildings adjacent to such property lines.
- iii A minimum of 2.5 metres wide perimeter area shall be contiguous to all side and rear property boundaries adjacent to other multifamily or non-residentially zoned land.
- iv No accessory building or uses including swimming pools, storage buildings, etc., may be located between a property line abutting a single family building and a main building. Such structures and uses may be located within the interior of the site, screened from view by main buildings unless adjacent to other multi-family or nonresidential development.
- v Buildings and windows should be located to maximize the possibility of surveillance of entry ways, parking lots, laundry areas.

Children's play areas should be sited to allow for clear parental monitoring.

- vi A private access drive on an adjacent lot may be used provided an easement is obtained and the width is adequate for the number of vehicles served.
- vii The maximum plot cover for buildings of any height from any site should not exceed 33 1/3 per cent.
- viii To minimize the impact of an apartment development the KSAC local planning authority shall have the power to require that the building(s) be oriented to take advantage of pleasant off-site views and/or constructed to minimize or screen poor or obtrusive views.
- ix The local planning authority can also require that active recreation facilities be located to minimize the intrusion of noise into an adjacent residential area (s) or require a method for mitigating noise from the recreation area.
- x A central garbage repository is to be placed in a location on the site where it is convenient to residents and can be easily cleared by garbage vehicles. It should be screened from public view, preferably by landscaping, be fly and vermin proof and fitted with vandal proof covers to prevent tampering.

11.2.11 Application Forms

i Outline Planning Permission

There has been a major increase in the number of apartment buildings being constructed. Because of the possibility of them being out of character with the rest of the neighbourhood, it is suggested that the developer seeks outline planning permission before embarking upon the preparation of detailed plans. This would give the developer the opportunity of knowing whether or not the concept is acceptable to the KSAC/local planning authority.

In this regard the guidelines set out under 'outline applications' should be followed.

ii Detailed Planning Permission

In case the developer wishes to apply for detailed planning permission, (or make a full application), then this can be done by filling out the appropriate forms and along with the necessary drawings submit his application to the KSAC/local planning authority.

In addition to the requirements of the KSAC or the local planning authority for obtaining permission, the following information should also be submitted:

- Total area of the property
- Names of boundary streets and the widths of existing right of ways
- iii Tabular Data Required

A final statement in tabular form which sets out the following data:

- Site coverage by building, parking and drives, open space and useable open space;
- Total number of dwelling units and density in h.r.p.h.;
- Total gross floor area for each type of use including dwelling units and type of use;
- Total number of off street parking spaces;
- Final engineering grading plans.

11.2.12 Amenity Space

i Requirements

In setting aside amenity space the developer may wish to provide one or more of the following facilities for children and youth:

 Recreational areas for children and youth, the minimum size of which shall be the area of a half circle with a 6.0m radius (626 sq. ft. or 58 sq. m.)

- Recreation area for ball games of which the minimum distance from the nearest dwelling unit should be 10m and the minimum size 10m by 10m.
- Swings or playground equipment for children ages two (2) to five (5) years. The minimum area shall be 10.0m by 10.0m (1,076.43 sq. ft. or 100.0m2). The equipment shall consist of two (2) swings or any other playground equipment that can accommodate two (2) or more children ages two (2) to five (5) years.
- Swings or playground equipment for children ages five (5) to twelve (12) years. The minimum area shall be 10.0m by 10.0m (1,076.43 sq. ft. or 100.0m2). The equipment shall consist of a minimum of two (2) swings or any other playground equipment that accommodates two (2) or more children ages five (5) to twelve (12) years.
- ii Calculation of Amenity Area Requirements.

The following example shows how the Amenity Area is calculated for a proposed Town House or Apartment Project and the steps that can be taken to rectify any deficiencies in the requirements:

• Site Factors

For the purpose of this exercise it is assumed that an Apartment (or Town House) project comprises the following:

Site Area	6,317 m ²
One building with a ground floor area of	743 m ²
Parking Area (surface)	1,672 m ²

No. Units Proposed Amenity Area per unit

20 studios	I 5 m ²
30 one (1) bedrooms	30 m ²
50 two (2) bedrooms	60 m ²
20 three (3) bedrooms	60 m ²

Supplementary Facilities Proposed

Communal Lounge

278m²

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 12

MINIMUM AND STARTER STANDARDS

12.0 MINIMUM STANDARDS

These standards apply to specific forms of development such as urban renewal, sites and services, squatter upgrading and to a lesser extent and in specific situations new towns. In these areas there may be more flexibility by the planning authorities in their assessment of projects with regard to minimum standards.

12.1 STARTER STANDARDS

These may include minimum standards, but in certain cases normal standards may apply. In such cases persons are allowed to build both house and infrastructure incrementally in accordance with an approved plan.

12.2 GUIDELINES

Based upon the above considerations the planning authorities may modify their requirements with regard to minimum lot area and the required amenity area provided that:

- i In fringe areas the project shall consist of single family or small multiple housing units with private outdoor living areas;
- ii When considering the densities for starter development it should be borne in mind that higher densities almost always result in higher per-lot infrastructure costs, as more land has to be set aside for circulation, public facilities, etc.
- iii In order to reduce down payment costs for low-income earners the price of the land should be weighted against the infrastructural cost.
- iv Internal layouts and room sizes are usually a matter for the developer and purchaser. However, adequate ventilation of the building is of concern to the authorities as well as the functionality of the building. In this regard developers may be asked to submit furniture layouts of the building, when submitting their application.

12.3 STANDARDS

Flexibility is needed to allow for an incremental approach in achieving minimum acceptable standards or normal standards on a phased basis. The main areas which lend themselves to such an approach are:

- i Lot sizes that should be a minimum of 111.6m2 or approximately 30 residential lots to the acre where the site is fully serviced.
- ii Where the disposal of sewage will be on site, lot sizes should be a minimum of 560m2 range. This density promotes a greater variety of plot development and unit design options and may be more appropriate for the owner-built schemes;
- iii The height of the building should not exceed 2 storeys; and
- iv Minimum set backs should be as follows
 - Front 3.5 metres from property boundary
 Side 1.0 metre from property boundary
 Page 2.5 metres from property boundary
 - Rear 2.5 metres from property boundary

This allows privacy in the front and rear of the building. Where the building is for mixed use (shop and residence) then it can be located on the front boundary.

12.4 Access

The circulation system should lend itself to incremental development. Graded or gravel roads will provide adequate access to residential plots in most situations when initial development costs are a major concern. Streets can then be conveniently upgraded in the future as funding is available. Improvements of various grades of carriageway surfacing, kerbs, drainage and sidewalks are appropriate. The minimum required by the National Works Agency should be adhered to.

12.5 LANDSCAPING

Starter standards densities in excess of 20 lots per acre/50 lots per hectare should have lands for recreation and open space provided at the rate of 500 sq. ft. (47sqm) per lot. This excludes land for all other public uses such as health centres, etc. Where the development is close to existing open space that is developed in

adjoining schemes, consideration could be given to decreasing the requirement.

In all instances the open space provided should be developed so that the occupants on moving into their houses can enjoy its use. For landscaping purposes each lot owner should plant at least one tree in the front yard or where possible an ornamental tree on the sidewalk.

12.6 PARKING

It is very unlikely that car ownership will be high in these developments at the outset. However, over a period of time it can be expected to increase as the occupants get more affluent and their transportation needs increase.

Provision should therefore be made for car parking spaces either on the lot or in special parking areas located in close proximity to the buildings. Alternatively the streets could be made wide enough to accommodate parking in certain areas but this would add to the infrastructure cost.

The number of car parking spaces required will be left to the discretion of the local planning authorities but the design and layout should meet the standards set out in the parking requirements.

12.7 SITE PLANNING CONSIDERATIONS

High densities are achieved by reducing the lot size. However, small lots usually require relatively more land to be set aside for circulatory access and more public facilities and open space are necessary. Project scale will however have an impact on the mix of land uses, as smaller projects require fewer public facilities and less land space will be dedicated to these uses.

Where the development consists of small multiple units, they should be placed in groups of four. This will make it easier to access sewer lines, etc., which may be located at the rear of buildings. Buildings should not be allowed individual access onto a main road but on a service road or footpath.

12.8 APPLICATION FORMS

Normally this type of development is undertaken under the Housing Act and is approved by the Minister of Housing. Where the Housing Act does not apply it is necessary to submit applications to, or obtain approval from the local planning authority / local authority. Where an application is dealt with under the Housing Act, this does not dispense with the need for an Environmental Permit or Licence under the Natural Resources Conservation Act.

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11.2.13 Calculations

Total Amenity	Area	Required
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	Unit Type	No. of Units	Requirement per Unit ((m2) Total (m2)		
	Studios	20	15	300		
	l bedroom	30	30	900		
	2 bedrooms	50	60	3,000		
	3 Bedrooms	20	60	1,200		
	Total			5,400		
ii	Site Coverage					
	Area of Building	g at Grade		743 m ²		
	Parking Area at Grade					
	Total			2,415 m²		
iii	Area of Site Useable as Amenity Space					
	6,317m2 (Site a	rea given) – 2,4	15m2 (site coverage, item	2) = 3902m ²		
iv	Total Amenity	Area Provide	d			
	Useable Site Are	ea -	3	3,902m² (item 3)		
	Communal Lounge - 743m ²			743m² (given)		
	Total	otal 4,645m ²				
v	Shortfall is (it	em no.1) 5,40	0 – (item no. 4) 4,64	15 =755m ² .		
	In order that the that the sections could be	•	a requirements may be n	net, the following		

- The overall site area could be increased, or ٠
- The number of dwelling units could be decreased, or •
- Additional communal facilities could be provided, or ٠
- Parking could be provided underground to free up more • surface area, or
- A combination of the above.

CHAPTER 13

COMMERCIAL DEVELOPMENT

13.0 MALLS / SHOPPING CENTRES

I3.0.1 Guidelines

Commercial development usually takes place within recognized shopping areas. It is generally convenient for both shoppers and traders that commercial activities be concentrated in this way and areas are specially allocated for this purpose in all zoning plans. The aim of planning control is to guide new shops to these areas, having regard to the shopping needs of the population. In large subdivisions, however, shops will usually be needed as either a single facility, sometimes as part of the residential unit or as shopping centres to serve neighbourhood needs. Irrespective of the type and size of shopping facilities they will require careful location and planning in relation to other developments.

13.1 DESIGN

In shopping Centres the design and arrangement of buildings/structures, access and circulation will be controlled in relation to surrounding areas to provide for efficient functioning of the shopping area and to insure adequate protection to adjacent and nearby residential areas.

13.1.1 Design Standards

Shopping Centres must therefore conform to the highest design standards. The design should ensure that it is integrated with and is complementary to the streetscape where it will be located. They should be accompanied by specific measures to address the following issues:-

- i The scale of the proposal in relation to its planned catchment area and existing floor-space provision.
- ii A good mix of uses to increase activity, particularly in the evening time.
- iii Be adequately serviced in relation to car parking, public transport and pedestrian access and facilities.

- iv The provision and design of street furniture including telephones, seats, litterbins.
- v The creation and enclosure of good pedestrian space at an appropriate scale.
- vi The provision within the overall design of the centre of public facilities such as toilets.
- vii The provision of adequate facilities for the physically challenged.

The design and layout of buildings should discourage graffiti and other forms of vandalism.

13.2 DESIGN OF SHOP FRONTS

Traditional shop fronts are frequently based on classical architectural features adapted to the practical needs of the shop. In the case of modern shop fronts creative interpretation of traditional design principles can create innovative designs which generate interest whilst not detracting from the property.

13.2.1 Guidelines for Shop Front Designs

- i To ensure that all shop fronts are of a high quality of design the following guidelines will apply.
 - Direct trading onto the pavement from a shop front left open will not be encouraged;
 - The emission of various fumes from the premises will not be tolerated.
 - The use of the public pavement for casual advertising or goods display will be discouraged and enforcement action will be taken against this practice.
- ii The design of a new shop front in a mall or freestanding should relate to the architectural characteristic of the buildings of which it forms a part.
- iii Freestanding buildings must respect the scale and proportions of the streetscape by maintaining the existing or approved pattern of development along the street and respecting the plot width.

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iv Where shops are designed as part of a residential unit they should maintain the character of the host building. They should be distinguishable but at the same time not overbearing.

13.3 STANDARDS

I3.3.I Access

The following should be followed with regard to access:

- i Rear servicing should be provided to shops where possible, if this is not achievable then provisions for servicing should be made clear of the roadway. In special circumstances however, servicing may be allowed on the roadway where it will not adversely affect the free flow of traffic and movement of pedestrians. Where servicing is from the rear a driveway or service road of 6.5 metres minimum width should be allowed to permit vehicles to enter and exit in a forward gear.
- ii In the case of large retail developments where access maybe from a principal road, the road authorities may require improvements to the road system before approval is given to such development. Suitable provisions should be made for the handicapped to enter any building. Pedestrian entry points could be from existing shopping streets linking other shopping streets or shopping centres.

13.3.2 Height

The height of the building will depend to a large extent on the nature and size of the activity or shopping centre. For general commercial activities in business centres, the height should not exceed 2 floors, with a plot ratio of one (1) and plot coverage of 50 per cent. In other areas the height should be one storey with a floor area ratio of 0.5 and lot coverage of 50 per cent.

13.3.3 Setbacks

The following standards apply to setbacks:

Where the buildings are to be located in an established commercial or town centre and it is impossible to provide on site parking they may be located hard on the property boundaries. The design of the building should include a canopy to protect pedestrian / shoppers from rain and sun.

In situations where the proposed commercial site adjoins a residential development then it should be set back at least three metres from the property boundaries of such developments. Generally the building should be located away from the roadway so that the required parking may be provided on site satisfactorily.

13.3.4 Parking

The following standards are to be followed:

- i Parking is an integral part of overall transport policy and the standards and design criteria set out in the Parking and Loading Requirements are to ensure that an adequate amount is provided. Car parking should be provided within the building line in such a manner as to ensure minimal injury to the amenity of adjoining premises. They should be suitably landscaped and finished and the bays should be in areas of practical shapes that allow for the parking and manoeuvring of vehicles. Narrow, obstructed and impractical spaces will not be acceptable. (see Figures 16–19).
- ii Standard requirements:
 - A two metre high opaque screen should be installed and maintained when a commercial lot abuts a residential area, no screening is required when said parking area abuts another parking area or a non residential use.
 - A one metre high opaque screen should be installed and maintained along each street line when the premises are located across the street from any residential area. No screening is required if the location adjoins another parking area or a non-residential use.
 - All lighting used to illuminate off-street parking areas should be so shielded or otherwise optically controlled as to provide glareless illumination in such a manner as not to create a nuisance on adjacent residential properties.
 - The location of each parking space and direct traffic flow should be identified by surface markings with white traffic paint and should be maintained so as to be readily visible at all times.

- Priority should be given to people with impaired mobility so they may park their cars as convenient to building entrance as possible. For multi-storey and underground car parks designated parking bays should be provided for cars with disabled drivers and passengers. These should be on the most convenient level and most convenient position for entrance and exit to the building or car park.
- Where basement parking is allowed the height of the area should be a maximum of 2.1m from floor to roof and 0.9metre above grade.
- No car parking will be allowed on the streets where it will obstruct the free flow of traffic and impede the movements of pedestrians and other road users.
- Where developments cannot meet the parking requirements they will be refused or the applicants asked to reduce their size to conform with the provisions.

13.3.5 Landscaping (see Figures 16-19)

The following standards are required:

- i Interior parking lot landscaping significantly improves the appearance of large commercial parking lots and should not be less than 10- percent of total paved area. Landscaped islands usually break up large expanses of asphalt and cars, while shade trees add a third dimension to soften the appearances.
- ii Islands should be large enough, and the soil uncompacted and treated to provide healthy habitat for trees and plant materials. They should be at least 1.5 metres wide where they are located in the interior and at least 2.4 metres wide where they are located from back of kerb to back of kerb. Planters should be a minimum of 1.3 metres in diameter.
- iii No parking space should be greater than 22.8 metres from a landscaped open space. Parking spaces should be separated from any adjoining roadway, by a landscaped island or elevated separation (i.e. sidewalk) of a minimum of 1.3 metres in width except along the roadway or parking bay aisle that provides the direct access.

- iv Where the parking area is less than ten (10) spaces a minimum of 3 ornamental trees should be planted.
- Where the area has 10 spaces and above one ornamental tree should be planted for every two parking spaces. The height of these trees should be at least one (1) metre, at the time of planting.
- vi Where trees are to be retained details regarding same should be submitted in the landscaping plan and every effort should be made to protect them during the construction period.

13.3.6 Drainage

Large commercial areas such as shopping centres tend to have huge volumes of surface water-run-off because of the impervious character of the extensive car parks servicing them. Surface water from these areas should be directed into underground drainage channels or culverts to the nearest gully or public drainage system and should not be allowed on roadways where it can become a problem to vehicular traffic and pedestrians. Where this is not practical, alternative means for holding and disposing of surface water should be developed.

13.3.7 Site Planning Consideration

The following are the guidelines for site planning:

- i In new shopping developments the design of the building should reflect the scale, style and character of existing buildings particularly where the development involves an infill site.
- ii Where the proposal is on a visually prominent site such as a corner site the design of the building should be such that it can make a contribution to the streetscape and be in sympathy with the townscape.
- iii New developments and alterations will be expected to provide suitable access for the disabled.
- iv Unisex disabled toilet facilities should be provided in retail outlets.
- v Mixed uses will often increase the use of public areas outside of normal shopping hours and should be encouraged especially on

the upper floors of such buildings which can be used for residential and office purposes.

- vi Many businesses can be carried on in rural and residential areas without causing unacceptable disturbance through increased traffic, noise, pollution or other adverse effects and these will be encouraged depending on the scale of the development, the nature of the use and the location of the site.
- vii Where there are older buildings with mixed use, especially those with retail activities at ground level and the mixed uses have declined as a result of changing circumstances, suitable re-use or new uses may be instituted in an effort to preserve the building and enhance the landscape.
- viii Both new development and large re-development projects should enhance prominent sites with building elements such as towers, arches or roof forms that will serve as identifiable and memorial landmarks.
- ix Large expanses of blank walls create a very unfriendly pedestrian environment. Walls facing the street should be punctuated with display windows, doors, indentation or other fenestration to add visual interest on the street. All sides of a building visible to the public should be treated consistently with quality materials and finishes.
- x The pedestrian experience helps to define a streetscape therefore, street level business should stimulate passer-by interest through the provision of windows that reveal internal activity.
- xi Public walkways should be provided to so that pedestrians will be able to move about safely and comfortably to and through all developments as well as between adjoining properties.
- xii Outdoor seating and dining create a sense of vitality more than any other amenity. Restaurant owners should be encouraged to include outdoor dining and seating where possible.
- xiii Concentrated flow of pedestrians is essential in shopping centres. Routes through the scheme should be kept simple and direct between key elements such as "magnet" stores. "Magnet" stores should therefore be located so that shoppers must pass through

the scheme to reach them.

- xiv Servicing should be at ground level from the rear of the building. Where this is not practical front servicing should be restricted to outside of peak shopping hours.
- xv Spatial requirements for retail users have to be anticipated and subsequently accommodated in the scheme of development. Small units tend to have a larger frontage in proportion to their size and often display is of vital importance to their commercial success whereas in magnet stores this is of little benefit. Where a store requires a large amount of space say between 10,000 – 20,000 msq this could be accommodated on two floors. Overall spatial area for the typical shopping unit should be between 200 – 400 msq.
- xvi The collection of solid waste should be at ground level from the rear of the building where possible and be restricted to off peak shopping hours.

13.4 Requirements for overall landscape plan

A Landscape Plan prepared by a qualified landscape architect should be submitted along with the application for shopping centre developments for approval by the planning authorities. Development of the site should recognize this plan.

13.5 Application Forms

Applications may either be "Outline" or "Detail", and should be made on the form provided by the KSAC or local planning authority if the development is in a Development Order Area. Outside of the Development Order area building permission must be obtained from the KSAC or Parish Council for which a fee is payable. This will be assessed when the application is made. Details for making planning applications are given under the chapter dealing with planning permission.

CHAPTER 14

OFFICE DEVELOPMENTS

14.0 GUIDELINES

- i Most zoning plans have areas allotted for office use and these will be strictly enforced. In urban areas where no zoning exists or in rural areas office use will be encouraged in or adjacent to commercial areas.
- ii Some office use may be allowed in fringe areas but these will have to incorporate residential activities such as apartments and town houses. Where office buildings are to be located in close proximity to residential buildings the proposals will be assessed in terms of impact on the visual and residential amenities of adjoining properties, building height, land use, building line, scale and massing, external finish, roof pitch and fascia height. Careful consideration should therefore be paid to the integration of new development into the existing environment.
- iii The following details should accompany the plans submitted with the application:-
 - Details of existing levels of land;
 - Proposed levels of the land to be developed;
 - Slab/floor levels of buildings;
 - Levels of adjacent land;
 - Location of existing buildings and other features, in relation to property boundaries;
 - Location and levels of adjacent buildings.
- iv The practice of converting residential buildings into offices without planning permission will be discouraged and strict control of illegal uses will be undertaken. In extenuating circumstances professional offices may be allowed in residential areas depending on the traffic flow to be generated and other physical planning considerations. The use of upper floors of properties in the retail area for small scale office developments will be encouraged. Where mixed uses are allowed stringent guidelines will be imposed on their establishment.

14.1 STANDARDS

14.1.1 Use Class

In the use classes order office falls into the category of "Business", where the purpose is to carry on general office use and in financial and professional services where the place is used by professionals for the practice of their profession other than health or medical services. Under "permitted uses" however, a medical doctor can practice his profession from his house where it is ancillary to the main use of the dwelling house.

I4.I.2 Access

Access to office buildings should be from roadways and car parks, footpaths, or walkways, etc.

14.1.3 Height

- i The height of office buildings in areas zoned for the purpose will be to a large extent determined by the floor area ratio, ground cover (foot print) and setbacks. The availability of parking to satisfy the needs of the development will also play an important role in determining its area hence its height. Usually the maximum permissible height in business centres is ten (10) storeys and in other areas two (2) storeys. However, in residential areas only a single storey will be allowed.
- ii In areas where high buildings are to be located the following assessment will be made:
 - The degree of overlooking (particularly of residential property) and consequent loss of privacy to surrounding premises;
 - The extent to which there is a disruption of the scale of an existing streetscape.
 - The extent to which the building detracts from important land marks.
 - The area of the site, and whether it is large enough to provide a visual transition from the scale of surrounding development.

- Whether the purpose or civic importance of the building would justify its prominence.
- iii Where the KSAC or planning authority approves a high building, a high standard of design and finish will be required commensurate with the location and civic importance of the site. Where such a building is likely to lead to a concentration of pedestrians seeking access to the public street the design of the building must ensure their safety and convenience as well as that of other road users.
- iv The use of varying building heights can often add to the visual amenity of the development and should be considered where appropriate.

I4.I.4 Setbacks

- i Where office buildings are located as infill in residential areas, they should not be located in front of established building lines or one, which maybe determined. They should have a setback of a minimum of 6 metres. Side yards should be at least 3 metres or a minimum width of 15 per cent of the width of the lot and should be screened to ensure the privacy of adjoining owners.
- ii In built up areas they should be located on road boundaries where there is no road-widening proposal or such that there is adequate sidewalk facilities for the easy movement of pedestrians. The buildings should be designed with a foyer to offer refuge to pedestrians should the need arise.

14.1.5 Parking

The parking provisions set out in the Parking and Loading Requirements are intended to ensure that road users are not obstructed and traffic and public safety are assured. To this end the design of parking bays and the number of spaces required should be adhered to. The layout of parking areas should take into consideration the shape of the land. Where allowed, underground parking structure should not exceed a height of 2.1 metres from floor to ceiling and a maximum height of 1.06 metres above the average grade level.

14.1.6 Landscaping

i Office development in residential areas should be cognizant of the existing landscaping situation and conform to it. Trees should not

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be removed without any regard for the environment nor should lawns overlaid with asphalt. Parking areas should be grassed and parking bays outlined in submerged blocks or similar devices, which will indicate their existence and position. Trees should be retained to provide shade and hedgerows should be maintained to provide privacy.

- ii In zoned areas where possible, parking areas should be landscaped in accordance with the guidelines provided in Chapter 13,Commercial Developments Malls / Shopping Centres developments. In business centres the green area that is required to be left around buildings should be adequately landscaped.
- iii Multi-storey buildings should be designed so that they can be greened through the use of rooftop and balcony greening. This will not only beautify the area but protect the roof from extremes of temperature.
- iv Lobbies and entrance foyers should be laid out so that they can accommodate potted plants. Where pedestrian movements will not be affected trees or shrubbery should be planted in pits on the sidewalk in front of the buildings.

14.1.7 Drainage

Surface drainage from the building and other facilities such as car parks should be integrated with the public drainage system and should not be constructed so that the flow of water will obstruct the movements of pedestrians on sidewalks or flood streets.

14.1.8 Site Planning Considerations - Plot Coverage

In general new office development will not be allowed to exceed a plot ratio of 2.00 in business centres and 0.50 in other areas. Developers should however check to ensure that there are no policy guidelines for the area indicating otherwise. The maximum plot coverage should be 50 percent and the minimum green space within the net plot area 20 per cent for buildings in business centres and for those outside 33.3 per cent plot coverage and minimum green space 33.3 per cent.

14.1.9 Site Planning Guidelines

i A substantial proportion of offices, or other rooms which are

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regularly occupied, should where possible have windows overlooking or facing the street and/or other communal areas, as a safety precautionary measure.

- ii Features such as entrances, refuse storage, parking areas, service roads should be designed so that there are no dark or shaded areas or potential hiding places.
- iii Footpaths should avoid blind corners and have clear visibility at all times.
- iv Alternate design solutions should be evaluated for each site to determine whether the development should be in the form of tower, slab, courtyard, T or L shaped blocks, and internal lighting problems should be overcome by the incorporation of an atrium to conserve energy.
- v At main crossing points the pavement should be dished to facilitate people with wheelchairs. This should be away from the corners, be on both sides of the street and flush to the road.
- vi Manholes, drainage, gullies, etc., should not be sited where people get out of cars especially at dished kerbs.
- vii Where a change of use to an office development is proposed due regard will be had for adjoining uses and noise insulation measures may have to be implemented prior to commencement of the use to protect the amenity of those areas.
- viii Suitable provisions for the physically challenged to achieve access to offices created as a result of change of use may have to be done where this is physically possible.
- ix Buildings should be designed to facilitate the physically challenged as much as possible. Please see section dealing with this matter.

14.2 OTHER REQUIREMENTS

A permit may be required under the Natural Resources Conservation Authority Act (1991) before the local planning authority can finalize the decision with the application. Information regarding this matter can be had from the KSAC or the local planning authority or the National Environment and Planning Agency (NEPA). (See also the Environment Section at Volume 2 of this "Development and Investment Manual").

14.3 APPLICATION FORMS

Application for office development can be made in outline or in detail. The process involved is indicated under planning permission. Applications should be made to the KSAC or the local planning authority in the area in which the development falls.

CHAPTER 15

ADVERTISEMENTS

15.0 GUIDELINES FOR ADVERTISEMENTS, SIGNS AND BILLBOARDS

The Town and Country Planning (Control of Advertisements) Regulations 1978 were made in exercise of the power conferred on the Minister by Section 26 of the Town and Country Planning Act.

15.0.1 Purpose of Control

- i The purpose of the control is for it to be exercised in the interest of:
 - Amenity
 - Public safety
- ii It gives the local planning authority the powers to provide for the regulation of dimensions, appearance and position of advertisements, the site on which they may be displayed and the manner in which they are to be affixed to the land.

15.1 DEFINITION

In the Act "advertisement" means any work, letter, model, sign, placard, board, notice, device or representation, whether illuminated or not in the nature of and employed wholly or in part for the purpose of advertisement, announcement or direction, and without prejudice to the foregoing provision includes any hoarding or similar structure used or adapted for use for the display of advertisement and references to the display of advertisement shall be construed accordingly.

These regulations apply to the display of advertisements on all land covered by Development Orders.

15.2 SCOPE

Provision is made for three matters in the regulation:

- i Some advertisements are excluded from control;
- ii Some advertisements are given deemed consent;

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iii All other advertisements need expressed consent from the KSAC or the local planning authority/Authority.

15.2.2 Advertisements Excluded from Control

Advertisements excluded from control are those:-

- i displayed on enclosed land and not visible from land outside the enclosure wherein it is displayed or any public right of way over such enclosure;
- ii displayed within a building provided that they are not illuminated, or are not visible from outside or the building is not principally used for displaying advertisement or unless there is access to the advertisement from within the building;
- iii displayed on or in a vehicle;
- iv incorporated in, and forming part of, the fabric of a building other than a building used principally for the display of such advertisements or a hoarding or similar structure;
- v displayed on an article for sale or on the package or container in or from which the article is sold or displayed.

15.3 Advertisements with Deemed Consent

Advertisements which are given deemed consent are as follows:

- i those relating to parliamentary or local government elections;
- ii parliamentary Standing Orders;
- iii traffic signs;
- iv functional advertisement of local and Statutory Authorities;
- v name plates of professionals or business names not exceeding 0.3msq;
- vi advertisement on the forecourt of business premises providing the advertisement displayed does not exceed 4.5msq;

- vii flag advertisement as long as it does not exceed 30msq;
- viii business operating in the open without a building may display one advertisement the size of which shall not be larger than 4.6msq and a maximum height of 6.0m;
- ix miscellaneous advertisement relating to premises on which they are displayed such as advertisement relating to any person, partnership or company separately carrying on a profession, business or trade limited to one advertisement not exceeding 0.37msq in area in respect of each person;
- x certain advertisements of a temporary nature such as those relating to the sale of the land on which they are displayed, those announcing sale of goods or livestock on the lands on which they are situated, those relating to the carrying out of building or similar works on the land on which they are displayed on those announcing any local event of a religious, educational, cultural, political, social or recreational character not exceeding 0.55msq on any premises;
- xi advertisements on business premises relating to business or other activity carried on goods sold or services provided and the name and qualification of the person carrying on such business or activity.

Many of these advertisements with deemed consent are subject to conditions relating to height, size of letters, illumination, in addition to the standard conditions required by the regulations.

15.4 DISCONTINUANCE OF ADVERTISEMENT

The local planning authority in the interest of amenity or public safety or where it is required to remedy a substantial injury to the amenity of the locality or a danger to members of the public, may serve a discontinuance notice requiring the discontinuance of an advertisement displayed with deemed consent or that of a specified class.

15.5 EXPRESSED CONSENT

Expressed consent is required for any advertisement that is not excluded from control or for which deemed consent is not granted, and this permission is obtained from the KSAC or local planning authority/Authority. Where an

application is made to the KSAC or local planning authority or TCPA for express consent, that authority may grant consent subject to the standard conditions and to such additional conditions as they think fit or may refuse consent.

15.5.1 Period of Consent

Every grant of expressed consent shall be for a fixed period of five (5) years and where the period given is less (unless requested by the applicant) the planning authority should give reasons for doing so. At anytime within six (6) months before expiry, an application may be made for renewal of the permission.

15.6 RESPONSE TO APPLICANT

The response to an application should be in writing and where permission is granted with additional conditions or refused then reasons for the decisions should be stated.

15.7 APPEAL

Applicants who are aggrieved by the KSAC or the local planning authority may appeal to the Minister for:

- i Refusing to give their consent for display of advertisement; or
- ii The granting of consent subject to condition; or
- iii Not communicating a decision on the application within three months,

Appeals may be made to the Minister in a manner prescribed by the relevant Development Order. (See Appeals under Legislation). The decision of the Minister is final in this matter. The local planning authority has the power to require the discontinuance of the display of advertisement not complying with these regulations, which were displayed prior to the coming into force of these regulations.

15.8 ENFORCEMENT

Advertisements not complying with the conditions under which they were granted consent are subject to enforcement procedures.

If an enforcement notice is not complied with the local planning authority can

enter the land and take steps necessary to comply with the notice.

Any person displaying a sign in contravention of these regulations can be fined by a Resident Magistrate or sent to prison for six (6) months.

Persons may appeal to the Resident Magistrate for the relevant parish against enforcement notice at any time before the expiry of the notice.

15.9 REVOCATION/MODIFICATION OF EXPRESSED CONSENT

Expressed consent may be revoked or modified by the local planning authority upon confirmation of an order by the Minister. The person who made the application, together with the owner or occupier of the land and any other person affected by the order and the local planning authority may be given a hearing by a person appointed by the Minister to do so if they so require, before the order is confirmed.

15.9.1 Exercise of Revocation

The revocation or modification may be exercised:

- i where the consent relates to a display which involves the carrying out of building or similar operations at any time before they are completed;
- ii where it relates to display before it has begun.

15.10 SUMMARY

It is unlawful to erect or maintain:

- i any sign which is not included under the types of sign permitted in Advertisement Control Regulations;
- ii any sign which by reason of its size, location, movement, content, colouring, or manner of illumination constitutes a traffic hazard or a detriment to traffic safety by obstructing the vision of drivers, or by obstructing or detracting from the visibility of any traffic control device, or by diverting or tending to divert the attention of drivers of moving vehicles from the traffic movement on public streets and roads.
- iii any portable signs except as permitted by the regulations;

iv any sign operated by the wind.

15.11 STANDARDS

The number and design of advertising signs can greatly affect the quality of a visual environment. The objective of the planning authority is to raise the general quality of advertisement signs so that they enhance the appearance and vitality of an area. Generally advertising signs will be limited to commercial areas where they are already a feature. Outside of these areas the local planning authority will identify areas where Billboards can be erected.

15.11.1 Urban Area Guidelines

- i the size and scale of signs should not conflict with existing structures in the vicinity;
- ii large scale commercial advertisement structures will not be allowed on or near buildings of architectural or historical importance or other heritage significance;
- iii signs will not be allowed where they compete with road signs or otherwise endanger traffic safety;
- iv signs should not interfere with windows or of other façade features or project above the skyline;
- v in shopping centres and office complexes these could be in the form of a directory in one location instead of individual signs.
- vi advertisement above fascia level should be avoided, except where it relates solely to the use of upper floors
- vii signs attached to a building façade should not be out of scale with it nor should it be excessively obtrusive;
- viii hanging signs will not normally be permitted in shopping centres, as they can be injurious to pedestrians. Where permitted they should be limited to one per store, and high enough to prevent accidents.

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15.11.2 Site Planning Considerations

Advertising hoardings have tended to be out of scale with the townscape and detract from the open countryside with impact on the amenity. They are usually used to advertise one product and the space is rented from an advertising company. Since their location is of great public concern they should be:

- i Sited on a temporary basis where they screen a derelict building or other eyesore or where construction work is ongoing.
- ii Sited in industrial areas where they are not out of character with the existing environment.
- iii The number and scale of hoardings in the vicinity of a site will be a material consideration, when dealing with applications. They will be prohibited in the open countryside, but where due to extenuating circumstances they are allowed then they should be located no nearer than 75 metres from the boundary of a highway or main road.
- iv Illuminated signs where approved can provide both information and colour in the townscape after dark. Their design should therefore be sympathetic to the building on which they are to be displayed and should not obscure architectural features.
- v Where signs pose a hazard to motorists through distraction or damage the character of an area the planning authority will seek to have them removed.

15.12 REQUIREMENTS

The Advertisement Control Regulations set out the requirements for advertising signs and should be consulted before applying for permission. The National Works Agency (NWA) also exercises control over signs placed in road setbacks/reserves and highway corridors. The NWA's permission is necessary to erect signs within these areas.

Advertising signs may also require building approval from the KSAC or the Parish Councils. Please refer to Section 7 Volume 1 of this manual for further information on advertising.

15.13 CONDITIONS

The following conditions are required to be attached to all consents:

- i All advertisements displayed and any land used for the display of advertisement shall be maintained in a clean and tidy condition to the satisfaction of the local planning authority;
- ii Any hoarding or similar structure, or any sign, placard, board or device erected or used principally for the purpose of displaying advertisements shall be maintained in a safe condition to the satisfaction of the local planning authority.
- iii Where any advertisement is required under the Regulations to be removed, the removal thereof shall be carried out to the satisfaction of the local planning authority.

15.14APPLICATION FORMS

Applications for permission to erect advertising signs must be made on the form provided in the Second Schedule of the Advertisement Control Regulations for the purpose. This form is different from the ones used in development applications, and deals only with advertisements.

Three completed copies and drawings as specified on the overleaf of the form are to be lodged with the Secretary of the Parish Council of the parish in which the application is situated and in KSAC with the Town Clerk.

The KSAC or the local planning authority receiving the application is obliged to consult with any neighbouring planning authority whose area is likely to be affected by the display of advertisement and/or with main road, railway, harbour, airport authority if it appears that the safety of any person could be affected.

The decision of the KSAC or the local planning authority should be communicated within three months of the date of receipt of the application, unless a longer time is agreed upon. The local planning authority may accept an application in writing made otherwise than on the form referred to if the information provided is sufficient to enable it to determine the application. The KSAC or the local authority charges a fee for advertisement applications.

CHAPTER 16

FUNERAL PARLOURS

16.0 GUIDELINES

For the purpose of convenience to the general public, funeral parlours should be located within the commercial areas of urban or growth centres close to main public transportation and traffic routes. Because of a general public dislike for this type of building, where necessary, they should be separated from residential areas by open space, public utilities or by landscaping. Some of the activities of a funeral parlour are connected with those of public mortuaries and it would be advantageous if they are located close to each other. They should never be located adjoining residential buildings except in situations where there are no objections from the owners or the community.

16.1 STANDARDS

16.1.1 Use Class

Funeral Parlour falls under class I - shops - in the Use Classes Order of the Development Order

16.1.2 Access

Funeral processions are usually frowned upon by the public so access to funeral parlours should be by means of public roads which do not pass through residential areas. They should be located in low rise buildings where it is easy and convenient for a hearse to drive to the refrigeration room and deliver bodies without having to expose them to public view. This will also facilitate easy access by bereaved members of the public.

16.1.2 Setbacks

The buildings should be set back at least 3 metres from side and rear property boundaries and no building is to be located within 12 metres of the boundaries of a main road when they are located outside of town centres. This is in addition to any reservation that may be needed for road widening. Where the building includes public viewing and a room/hall for funeral service, parking should conform to the design standards and requirements set out in the Parking and Loading Requirements. Provision should also be made within the lot for the space necessary for loading and unloading of hearses or mortuary vehicles when the building is in a built-up area.

16.1.4 Landscaping

Landscaping is important as it softens the environment in which the building is located. Side and rear yards are to be grassed and planted with hedgerows and hard areas to be planted with trees and shrubs. In this regard the landscape requirements for commercial areas/shopping centres will apply. The site should be properly fenced and screened with decorative material or a solid wall from all main thoroughfare. The heights of fences should not exceed 1.2 metres on the front property boundary and 2.1 metres on the side and rear.

16.1.5 Drainage

Funeral parlours should be located in areas that have a central sewerage system and if this is not possible the site should be such that adequate sewage and drainage facilities can be provided on site. These should be to the requirements and satisfaction of the public health authorities. Surface run-off should be directed into public drainage channels where it cannot be dealt with on site.

16.1.6 Site Planning Considerations

Sites for commercial funeral parlours should be about $50m \times 25m$. This will allow a building incorporating a cemetery office, a repository and other facilities for the collection and temporary storage of bodies pending burial.

Where necessary the building should also be able to accommodate embalming rooms, reposing rooms, and service hall for conducting funeral activities, including preparation of bodies and the performance of last rites.

16.2 REQUIREMENTS

Where a funeral parlour is to be located in a residential area a letter of support from the residents should accompany the application to avoid delay in its processing due to objection from the public.

16.3 Application Forms

Applications in Development Order areas should be made to the local planning authority with the supporting documents.

CHAPTER 17

MARKETS

17.0 GUIDELINES

Markets are usually constructed by Parish Councils to satisfy the demand for these facilities by vendors. They play a significant role in Jamaica's shopping patterns and are the catalyst for the growth and development of most rural towns, as they become established to satisfy the needs of vendors and customers alike. They are usually located at cross roads where it is convenient to all parties and usually start out as produce markets selling ground provisions and animals; over a period of time other items such as haberdashery were included.

17.1 LOCATION ISSUES

As a commercial area grows, the market area usually becomes congested and has to be removed or relocated to the edge of the urban area, to facilitate easy traffic flow and movement of pedestrians. Because of this they are usually located in zoned areas or on sites specifically selected by the local authorities on the edge of urban areas. The underlying guideline however, is the convenience to sellers and buyers and the spin off activities for other commercial ventures. The provisions for a market in an urban area are approximately 1 stall per 55.65 households or approximately 40-45 stalls per 10,000 population. Each case however should be assessed on its own merit.

17.2 CRAFT MARKETS

There are also craft markets that deal in the sale of local souvenir items to tourists and are mostly located in resort areas. They are also constructed by government through the Urban Development Corporation (UDC) or the Tourism Product Development Company (TPDCo).

17.3 STANDARDS

17.3.1 Access

Markets should ideally be easily accessible and visible to the general public. Usually vehicular access to markets should be such that they can accept buses and trucks. A minimum width of 6m is recommended. Pedestrians should have their own access areas so that there is no conflict between them and the motor vehicles, using the compound. A minimum width of I m

is recommended. Special lanes should also be provide for the movement of handcarts.

17.3.2 Height

The height of a market should not exceed two floors, although a single storey is preferable. The lower floor should be used for ground provisions and the upper for haberdashery and craft items.

17.3.3 Setbacks

Where space is available market buildings should be set back at least 2 metres from side boundaries. The front of buildings should be at least 3 metres from the property or road boundary.

17.3.4 Parking

- i The parking areas should be located at the rear of the building, where possible entrance should be from a side road. If a side road is not available then the building should be located at least 4 metres from a side property boundary to allow vehicular access to the rear. It is not desirable to have parking to the front of the building as this could very well be converted to an open air market area.
- ii In laying out the parking facilities, provision should be made for loading and off loading areas for trucks and buses avoiding contacts with spaces provided for motorcars. These should be in conformity with the parking standards set out in the Parking and Loading Requirements. The number of spaces to be provided should be determined by the local planning authority based upon the projected use and size of the market. In open air markets parking should be 3 car spaces per vendor and craft markets should have spaces for four buses along with that for motorcars.

17.3.5 Landscaping

All open areas and the motor vehicle parking area should be landscaped with ornamental trees. Where a maximum of five parking spaces exist one tree should be provided and one tree thereafter for each two spaces. The planting of trees should be guided by the provisions under the landscaping of shopping centres. This landscaping guideline applies to craft markets as well.(see Figs.16-19).

17.3.6 Drainage

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The interception and disposal of surface run off should be given special attention. Drains should be provided for the site leading to the drainage system on roadways which can satisfactorily dispose of the water. Run off should not be allowed on adjacent private lands or to settle or accumulate on roadways serving the market, especially where they will impede pedestrian access.

17.3.7 Site Planning Considerations

- As far as the size of a market is concerned this depends very much on viability and the availability of suitable sites within a particular catchment area. There cannot be a definitive rule to derive the minimum size of a market. However for general planning purposes the optimum size of a market site should be about 3,000 msq for a two storey market. Sites with smaller areas should be considered on an individual viability basis. In terms of site requirements per capita, the area required for a single storey market is 0.065 msq – 0.073 msq per person and for a two storey market 0.040 msq – 0.045msq to be adjusted according to the mix between large and mini-stalls.
- ii Nuisance Issues

Market activities can create nuisance such as odour, waste water and noise from delivery vehicles during early morning hours, hence due consideration should be given to the location and design to minimize these impacts. Buffers should be provided (landscape or otherwise) between markets and other buildings that could be affected.

iii Waste Disposal

Adequate sanitary facilities should be provided for use by both the public and vendors in an easily accessible area of the market building. (See Guide under Institutional Services / Social Amenities –Public Sanitary Facilities).

iv Solid waste should be collected and disposed of in accordance with Solid Waste Management Regulations.

17.4 REQUIREMENTS

Areas provided for the sale of meat and fish should conform to the Public Health requirements.

17.5 APPLICATION FORMS

These are available from the local planning authority for the area in which the market is to be built.

CHAPTER 18

PETROL FILLING STATIONS

18.0 DEVELOPMENT ORDERS - PETROL FILLING STATIONS

Under the powers conferred upon the Town and Country Planning Authority by the Town and Country Planning Act, Development Orders were instituted island wide to control the erection, alteration of buildings or equipment or the change of use of land or buildings, from any other use to that of a Petrol Filling Station.

18.0.1 Definition

The Development Order defines petroleum filling station as "land, building or equipment used for the sale or dispensing of petrol or oil for motor vehicles or incidental thereto, and where any part of such land, building or equipment is used for another purpose, shall include the whole, whether or not the use of a filling station is the predominant use of such land or building."

18.1 GUIDELINES

Petrol filling stations can have significant impacts on the environment and amenities of an area as they produce high volumes of traffic and are usually located on main roads. The following guidelines should be applied to all such developments:

- i Filling Stations will not be allowed in any area where the traffic situation is such that it will cause obstructions in entering or leaving a station or on tight curves where visibility is not adequate.
- ii Wherever possible stations should be erected on level rather than sloping site to prevent rolling of discarded materials such as cans and drums.
- iii When sited in shopping centres, stations should be located in an isolated area of the development and be separated from other buildings by landscaped or buffer areas at least 4m wide and should meet the other necessary criteria such as set back.
- iv Environmental impact on streams, lakes, ponds, aquifer, etc. will be taken into consideration in assessing the application. An Environmental Impact Assessment may be required for the site.

- v Canopies and support over pumps and service equipment when located less than 6m from interior residential lot lines or buildings or structures should be constructed of non-combustible material.
- vi Signs should be in accordance with the advertisement regulations and should be located so as not to obstruct the visibility of motorists and should be large enough so that they can be seen from a reasonable distance at a reasonable speed.
- vii Integral containers of adequate design and capacity should be provided for solid waste, such as discarded cans, or bottles.
- viii Proper facilities for storage and disposal of used and waste oil and gas must be provided.
- ix The station should be located within the speed limit area of 50 64 kmph in the interest of traffic safety.
- x Operations outside of a prominent structure will be limited to the dispensing of fuel, oil, additives, water air, minor parts replacement, tyre repair and cleaning and detailing. No painting, fender or body repair or tyre recapping will be allowed on the site.
- xi No damaged or permanently disabled vehicles should be kept on the site for more than 48 hours.
- xii Incidental convenience items such as soft drinks, candy, cigarettes and ice cream for the immediate consumption of the motoring public may be sold within the main structure designed for the purpose.
- xiii Petrol filling stations will not generally be permitted adjoining residential areas, unless it can be clearly demonstrated that no significant damage to residential amenities will occur by reason of factors such as noise, visual obtrusion, safety considerations or fumes and smells. In this respect the noise from any fixed plant or machinery should not exceed the prevailing background noise level at the site boundary.
- xiv The potential for noise disturbance from filling stations is greater at nights and therefore the hours of operation in residential areas may be restricted.

18.2 STANDARDS

The standards in this section are intended to ensure that service stations are functionally and aesthetically compatible with adjacent uses, provide adequate off street parking and traffic circulation, minimize visual/noise/air pollution and reduce vehicular conflict.

18.2.1 Access

- i Vehicular ingress/egress/crossover should be reasonably safe with adequate approach distances especially where main roads and intersections are involved.
- ii Normally no ingress or egress from a filling station shall be closer than 45.72m to any road intersection or sharp corner, or 76.2m from the intersection of two main roads.
- iii The maximum width of a driveway shall be 6.1m at the sidewalk unless the local planning authority is of the opinion that a wider driveway is necessary due to the nature of the site and volume of traffic.
- iv There shall be no more than two driveways for any one street frontage, such driveways shall be a minimum of 7.6 metres apart and may not be closer than 1.5m to any side property line except in functionally integrated commercial or industrial complexes.
- v The radii of the curves at the entrance and exit should be a minimum of 10m.
- vi Every new petrol filling station must be laid out in such a manner that vehicles are refuelled, and can wait to be refuelled, clear of adjoining roadway. The means of access should be designed to give best visibility.
- vii Adequate site lines will be required. Proximity to existing minor or major road intersections shall also be a consideration. Access to filling stations shall not be permitted closer than 35 metres to a road junction.
- viii Forecourt circulation areas will be required to remain free of any structures and any activity that reduces driver visibility at entrances/exits will not be permitted.

- ix Petrol filling station canopies should not exceed 5 metres from floor to underside of the canopy. Where lorries have to pass under the canopy for service the height may be increased to 5.5 metres. The depth of the canopy top or its side panelling should not exceed 0.75 metres.
- x A canopy over a petrol station must be designed as an integral part of that station and should relate to the scale and position of the adjoining buildings and spaces.
- xi The maximum size of one face of the head of pole/gantry sign should not exceed 2msq. (See Fig. 20).
- xii The bottom 1.5m portion of all signs should remain free of advertising or information.
- xiii No pole or goal post sign should extend higher than the top edge of the filling station canopy and in any case should not exceed 5.25m in height in closely built up areas, or 5.75 metres in more open areas. Where justified for road safety reasons, a height of up to 6.5m may be accepted in the open countryside.
- xiv The height of the sales building should be no greater than 1 storey, normally to a maximum height of 2.5m at eaves level.

18.2.2 Setbacks

- i Petrol stations should be located at a minimum of 152.4m from any public institution and facilities such as schools, churches, public libraries, auditoriums, hospitals, public playgrounds, etc.
- ii The minimum road frontage should be 30.5m long and all gasoline pumps or filling service should have a clear setback of 7.6m from the road boundary of the site. Where the petrol pump and other services are at a distance of 9.1m or more from the street boundary of the site, the frontage may be reduced to 15.2m. Signage will not be allowed in this area.
- iii New gasoline pump islands or additions to existing ones shall be set back at least 4.9m from side property boundaries.
- iv Buildings are to be located a minimum of 12.2m from road boundaries to provide adequate area for manoeuvring of vehicles in the service area.

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- v Petrol pumps should be set back a minimum of 30.48 metres from any residential building.
- vi The shop and sales area should not be positioned in front of the building line of the street frontage and should possibly approximately align to the adjoining building.

18.2.3 Parking

- i Parking facilities associated with any shop on site will be required along with that for the station itself and should be sited so as to avoid interference with the free flow of traffic, using the petrol pumps.
- ii Parking space guidelines and requirements for the development are given in the Parking and Loading Requirements.(see Figs. 7-12 & 16-19).

18.2.4 Landscaping

- i Landscape proposals prepared by a Landscape Architect showing a scheme of hard and soft landscaping should be submitted along with the application for development, paying particular attention to side and rear boundaries.
- ii Road boundaries can be finished with a wall not more than 0.5 metres in height over the level of the adjoining road or footpath and planting should be incorporated on the top of all such walls to lessen the impact and starkness of a filling station on the street scene.
- Landscaping including trees or shrub planting and suitable screening, shall be required to protect the amenities of the surrounding area and enhance the appearance of the development.
 In a residential area a landscaped open area 4.6m wide shall be provided along rear property boundary and 3.0m wide along the side property boundaries.
- v Planting materials of such size and quantity to provide screening function within a reasonable time should be provided in these areas.
- vi Climbing plants should be used to green screen walls where they have no architectural feature.

18.2.5 Drainage

- i Waste water from the washing of motor vehicles and other activities and sewage disposal should be to the satisfaction of NEPA and the health authorities.
- ii Run off from the site shall be disposed of within the site and shall not permitted on the public road or adjoining properties.
- iii The surface of the forecourt shall be graded, surfaced with bitumen macadam or similar material and drained to the satisfaction of the planning authority. A petrol interceptor trap shall be fitted to the surface water drainage system.
- iv Canopy drainage should be connected directly to the surface water drainage system.

18.3 LOT SIZE

The establishment of a service station may only be permitted where the land to be developed is sufficient to allow manoeuvring of vehicle within its curtilage but should not be less than 1,858msq with a minimum frontage of 30.5m on the primary street except as set out under "Set Backs". Where the site is part of a functionally integrated commercial or industrial complex size may be reduced to not less than 1,120.0 msq.

18.4 SITE PLANNING CONSIDERATIONS

New petrol filling stations and refurbished existing stations will be required to have a high quality of overall design and architectural layout to ensure an attractive environment, which integrates with and complements or enhances the surroundings. In assessing individual planning applications for new or refurbishment of existing filling stations the following site planning considerations will apply:

- i The layout of new or redeveloped petrol filling stations shall permit safe access for delivery tankers (cab plus trailer) up to 15.25 metres in length, and an adequate off road area shall be provided for parking these vehicles safely without obstructing access to pumps, while fuel is being delivered to the petrol station.
- ii The size of building contained in a petrol filling station shall be related to the scale, character and form of adjoining structures to ensure an attractive development that integrates with and complements its surroundings.

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- iii Car washing and vacuuming facilities should be located so as not to interfere with residential amenities or other adjoining sensitive land users. Where these exist they should be screened by a masonry wall 3.0m high.
- iv The design and appearance of petrol filling station is particularly important therefore it should be approached sensitively to ensure that the visual impact of the proposed buildings and structure is kept to a minimum.
- v Lighting should be kept to a functional minimum, should be in the form of high pressure luminaries which gives a much softer light than obtained from fluorescent fittings and should be installed on the underside of the canopy, on the pumps or as street lights, and not as spot or floodlights.
- vi Decorative solid masonry walls shall be constructed where necessary to effectively screen the service station, or uses operating within the service station, from adjacent properties and public rights-of-way. The height will depend upon the activity but should not be less than 1.3m.
- vii All on site utilities shall be placed underground, where this is possible.
- viii Ancillary retail uses may be permitted but having regard to the impact on urban retailing areas and in the interest of traffic and pedestrian safety it will be a requirement that the total floor area of any retailing component (such as shop) shall not exceed 100 square metres.
- ix No fuel pumps or other mechanical equipment shall be installed so as to permit servicing of motor vehicle standing on a public street or highway.
- x All service areas should be paved to avoid dust nuisance.
- xi The exterior design of the building should be compatible with adjacent development and should be such that it is not detrimental to property values in the area.
- xii Where the site adjoins the side of , or rear boundary of a residential lot, a solid wall 3.0m in height should be constructed and maintained along that lot boundary.

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- xiii A raised kerb of at least 15cm in height should be erected along street property lines, except for driveways openings, so as to prevent operation of vehicles on sidewalks, and to define entrance and/or exit points.
- xiv Each tank shall be vented to the atmosphere outside of buildings by means of an independent vent pipe which should not be less than 3.65m in height or 0.6m above the top of the nearest adjacent building. They should be sited away from residential properties and occupied buildings.
- xv Where possible petrol filling stations should not be located at intersections.
- xvi All storage tanks with volatile flammable substances shall be installed below ground.
- xvii Fuel should be stored in double walled container tanks to minimize leakage and prevent contamination of ground water.
- xviii A toilet for customers should be provided and kept open during operating hours and should never be used for storage of cleaning and other equipment.

18.5 Types of Application and Procedure

18.5.1 Application for Determination

An applicant can apply for a determination to ascertain whether or not planning permission is required.

18.5.2 Enquiry

- i An enquiry can be made to the National Environment and Planning Agency (NEPA) or Local Planning Authority to determine if:
 - the erection and/or alteration of building or equipment for the sale of petroleum etc., on any land; or
 - the change of use of land or buildings from any other use for this purpose will be given planning permission.
- ii An enquiry should be made in writing to the Local Planning

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Authority and should contain a description of the:

- operations or change of use proposed and
- land to which the proposal relates.
- iii Documents required for enquiry

The Local Planning Authority may direct the applicant to produce evidence to verify any of the particulars of the information submitted.

Documents required:

- address of property;
- a location plan of the subject property to a scale of 1:12,500, 1:1,250 in urban areas or any other available scale;
- site plan showing any existing buildings; and
- description of operations or change of use proposed.

18.5.3 Outline Application

- i Where an applicant so desires, an outline application may be made for permission to erect the building, subject to the making of a subsequent detailed application to the Local Planning Authority with respect to matters pertaining to the siting, design or external appearance of the buildings or the means of access thereto or landscaping.
- ii An outline application should be in writing and should include particulars and such plans and drawings as are necessary to illustrate the proposal. Applicants should not undertake any construction works before final approval is obtained from the local planning authorities.
- iii Documents required:
 - 4 copies of site plan/location plan;
 - 4 copies of proposed layout of development at an appropriate architectural scale;

- sketch of elevation of any building proposed; and
- written details of proposal.
- a note stating that the drawings are for illustration purposes only.

18.5.4 Detailed Application

- An application for detailed planning permission should be made on the appropriate form obtainable from the Local Planning Authority. This should be accompanied by plans and drawings necessary to describe the development which is the subject of the application. The Local Planning Authority may request further information to be given in respect of an application before it is finally processed.
- ii Documents Required
 - 2 copies of completed application forms;
 - site location at a scale of 1:12,500, 1:1,250 in urban areas or any other available scale (6 sets of drawings);
 - site plan at an appropriate engineering scale showing access and egress, lot boundaries, drainage details, landscaping, etc. (6 sets of drawings)
 - detailed architectural drawings, i.e., plans, elevations, sections etc. to a scale of 1:100, 1:50 (6 sets of drawings);
 - structural engineering drawings and calculations, where necessary (6 sets of drawings).

18.6 POWERS OF THE TCPA REGARDING PETROL FILLING STATIONS

The Town and Country Planning Authority (TCPA) in exercise of powers conferred under Section 12 of the Town and Country Planning Act directed the local planning authorities except St. Ann that all applications received for this type of development shall be directed to it for its decision.

18.7 APPLICATION FORMS

An application pertaining to petroleum filling stations is to be submitted to the KSAC or the Local Planning Authority in the areas in which the development is proposed. It is then sent to NEPA which seeks the advice of other agencies, as necessary. The National Environment and Planning Agency coordinates these comments and makes appropriate recommendations to the Town and Country Planning Authority. The decision of the Authority is then dispatched to the relevant Local Planning Authority. The petrol filling station will also require building approval under the KSAC building act or the local building act regulations where necessary.

An application for an Environmental Permit is required from NEPA for storage, stockpiling and dispensing of petrol pursuant to the NRCA Permits and License Regulations 1996.

CHAPTER 19

INDUSTRIAL DEVELOPMENT

19.0 GUIDELINES

In planning the development of industrial premises there is an obvious distinction between individual sites and industrial estates. In the former case, particular site criteria will influence the shape and form of the design and layout of the buildings whilst in the latter an idealized, conceptual approach may be adopted.

19.0.1 General Planning Considerations

The planning decision on an application for industrial development will depend on its location, the land use zoning, the effect of the product on the amenity, traffic implications and other considerations. The nature of the industrial process to be carried on is important as some are more damaging to amenities than others. Industry is divided into three (3) groups:

i Noxious

These industries, such as those emitting odours, noise, or where vibration or fumes are likely to be a problem, are incompatible with residences and other institutions and should be placed far away from housing areas. Certain industries have special needs, for example to be near water or the source of their raw materials and these factors will be taken into account and weighed against any planning objections that may arise in their location. The indirect effects of siting various industries in rural areas will also be considered.

ii Heavy Industry

These are incompatible with residential development because of the fumes, smell, dust, noise they emit and should take place only in areas allocated for the purpose. Generally they will not be located near residential areas, or institutional facilities e.g., schools, hospitals. Industries which serve the needs of agriculture may be acceptable in rural areas.

iii Light Industry

These are industries in which the process carried on is not detrimental to the amenity of an area by reason of noise, fumes, smell, traffic generation. Light industrial use involves the manufacture of food, beverages, printing and publishing, electronic equipment, optical equipment, watches, clocks and jewellery. Development for warehousing have similar development standards as that for light industry under which land use category it falls.

19.1 WAREHOUSE DEVELOPMENT

19.1.1 Guidelines

- i Where a warehouse is given permission in a residential area, conditions will be imposed on such approval.
 - Restricting or prohibiting the hours of operation in the evenings and on weekends.
 - Prohibiting the storage of materials outside of the building
 - Prohibiting the sale of goods outside of the building
 - Protecting the residential amenities of the area
- ii Location

Depending on the materials to be stored on the site and the scale of the activity, these buildings may be located on individual sites, in building complexes such as multi-producer units and may be located in industrial estates adjacent to residential areas, or land zoned for the purpose in other areas. Where proposals would generate a large volume of traffic they should not be located where they would encourage movement of such traffic through residential areas.

iii Largescale Developments

Large developments may be required to provide sites for commercial facilities and other amenities to service the needs of workers and visitors. Such facilities may include restaurant, stores of various types, and a small office building.

19.1.2 Standards

Access to buildings should be by roads designed to carry heavy duty traffic such as trucks and trailers. Gateways should be wide enough to accommodate trailers and trucks and to prevent them impeding the free flow of traffic when entering the premises.

19.1.3 Height

Buildings should not exceed two floors in height in zoned areas and a single storey in residential areas.

19.1.4 Setbacks

Minimum setbacks of buildings from main roads should be 15.2m. In residential areas they should be 4m from side and rear boundaries. Service vehicles entering the premises should not protrude on the roadway. The gate should be set back sufficiently to avoid this occurring.

19.1.5 Parking

- i Plenty of space is needed for parking, loading and manoeuvring, clear of the public road. Parking area should be a minimum length of 13.7m with a manoeuvring space of 15m for trucks and trailers.
- ii Areas between the road and boundary line may include car parking spaces provided the area is landscaped.
- iii All parking lots must be paved and be laid out in accordance with the requirements set out in the Parking and Loading Requirements both for car parking spaces and the loading/off loading of motor vehicles.

19.1.6 Landscaping

A high standard of design, finish, layout and landscaping will be required for industrial warehousing. A comprehensive landscape plan should be submitted with the application showing the size, height and location of trees, those to be planted and those to be removed or retained. Hedgerows could be used to screen buildings and parking areas from public view.

19.1.9 Drainage

All industrial applications including warehouses should include a report with their application, indicating a drainage plan based upon site conditions. Sizing of drainage structures should be determined on the basis of hydrological analysis. Provision for new drainage structures should be shown on the plan along with existing culverts, outlets, inlets, and earth drains. The developer will have the responsibility to maintain his drain facilities including removal of debris and silt. Discharge from pipes will not be considered acceptable as this is likely to result in erosion and slope instability on sloped areas.

19.1.2 Site Planning Considerations

In general new warehousing development shall not exceed a plot ratio of 0.5 and a site coverage of one third of the site with minimum green spaces requirement in net plot area being one third. Compliance with such standards will also be dependent on satisfying other considerations such as parking needs. Where an existing site or surrounding sites have a plot ratio or site coverage in excess of these standards, redevelopment or development as the case may be, may be permitted to this higher level. A number of details must be taken care of such as:

- i On site storage for raw materials and finished goods, should be adequately screened.
- ii Where two or more buildings are contemplated adjacent to each other a uniform design for boundary fences, roof profiles and building lines are desirable.
- iii A variety of unit sizes should be provided to cater for the differing needs of potential occupants.
- iv Details of the nature of the proposed activities and the means of controlling noise, light, solid waste from this activity together with ameliorative measures should accompany each planning application.
- v All buildings must be designed with a sprinkler system for fire protection.
- vi In residential areas the character and design of the building should be in keeping with adjoining developments and should be sited on corner lots.

19.1.3 Requirements

It may be necessary to have an Environmental Impact Assessment (EIA) done before the planning application is considered. Please refer to "Planning Permission."

19.1.4 Application Forms

Plans of the proposal must be submitted to the local planning authority and approval obtained in writing before construction is started. Building approval must also be obtained in order to begin construction.

19.2 GUIDELINES FOR GARAGE / AUTO MECHANIC FACILITIES

These guidelines are established to ensure the compatibility of existing and new repair garages to adjacent and surrounding uses for the protection of the health, safety and general welfare of the workers as well as the residents of the area in which they may be located:

- i Repair garages should be located in areas zoned for industrial purposes or specifically for this type of activity.
- ii All existing and new motor vehicle repair garages should conduct repair activities within a building that is enclosed on at least three sides.
- iii No disabled motor vehicles or large component part of such disabled vehicle should be kept on the site. No junking or wrecking of motor vehicles will be allowed, nor should vehicles be kept on the site for scavenging of used parts.
- iv No existing or new motor vehicle repair garage should utilize required parking stalls or aisles for the storage or repair of vehicles, disassembled auto parts, debris or trash.
- v Approved, portable fire extinguishers should be provided in repair areas of all garages, especially where bodywork and painting are taking place.
- vi All airborne controlled products (i.e. hazardous contaminants) must be controlled to levels that do not result in a health hazard to a worker or other persons nearby.

- vii Canteen and other welfare facilities should be provided for the workers to discourage the sale of consumables in the vicinity of the site.
- viii Where garages are permitted in residential areas for the convenience of the residents, the premises should be enclosed by a 2.0 metre high wall on all sides to screen open work areas from view.
- ix No more than two (2) tow trucks will be allowed as an incidental use on the site.

19.2.1 Standards

i Use Class

Repair garages are normally located in areas zoned for industrial use or in which legal industrial use is being carried on. However, there may be situations in which they are permitted in residential areas and in such circumstances they must conform to the conditions of approval attached. Such conditions are intended to protect the amenities of a residential area and prevent discomfort to the residents. They may include hours of operations, design of the building, methods of controlling noise and other nuisances.

- ii Access
 - Repair garages should be located along main arterial roads where they will be easily accessible by motor vehicle owners.
 - Exit and entry should be from one point only and should not be more than 6m wide.
 - All access to the site should not be less than 15.2m from any road intersection or 122m of the entrance to any public park or playground or 122m of the nearest point of any building in which a school, hospital, or other public building is located.
- iii Height

The height of the repair building should not be more than a single

storey or a maximum of 4.26m to accommodate tall vehicles. The office and accessory building area, however, can be two storeys in height.

iv Setbacks

All buildings should be located within 1.8m of side and rear property boundaries. Buildings should not be forward of any building lines in zoned areas and a minimum of 6.0m in residential areas.

v Parking

Provision should be made for the parking of cars intended for repairs as well as for visitors and employees. At least three (3) spaces per service bay should be provided in addition to the requirements for the office area as set out in the Parking and Loading Requirements.

vi Landscaping

All general landscaping of the site should be in character with that generally prevailing in the area. Preservation of existing trees over 10.16 cm. in diameter to the maximum extent possible will be encouraged. If no trees exist then the developer should provide one (1) tree for each two parking spaces. (see Figs. 16-19). Buffer areas should be planted with shrubs and other hardy plants, which will provide screening from residential buildings in areas where these exist.

vii Drainage

A surface drainage plan should be submitted with the application showing how the site is graded and the direction and destination of all surface waters. It may be necessary to direct the flow into pits constructed on site for the purpose.

- viii Site Planning Considerations
 - The site shall not be less than 929msq in area.
 - Service bays should be oriented where possible so that they do not face the street.

- Decorative solid masonry walls shall be installed to effectively screen service bays and work areas from surrounding properties.
- An enclosed repair garage and/or service area should be provided with an approved mechanical exhaust and makeup air system to prevent excessive accumulation of carbon monoxide, exhaust fumes or flammable and toxic vapours.
- The storage of any and/or all flammable, combustible substances, liquids shall be in an approved, listed cabinet.
- Where spray coating operations are to be conducted fire code requirements should be approved by the Fire Department.
- When a repair garage is being established in a building with more than one tenant a two hour fire separation is required between the tenants.
- Body repair work should be undertaken in areas where the noise etc., can be controlled.
- No repair of motor vehicles should take place on a roadway or within a road reservation.
- Where possible they should be located on a corner lot.
- vii Requirements

Planning and building permission is required for the erection of garages. This should be obtained before any construction work commences on the building. Failure to do so could result in enforcement action being taken against the owners and operators that could be very expensive to them.

ix Applications Forms

Applications for the erection of garages in Development Order Areas should be made to the local planning authority from which a form is provided for this purpose. It is obtainable free of cost.

19.3 GUIDELINES FOR PORT AND BEACH FACILITIES

The coastal zone is an important national resource as it is the location of a range of environmental, ecological, social and economic activities. The coastline is dynamic and shaped by powerful material processes, which gives it variation in its topography including cliffs, coastal lowlands and sand dunes. It is therefore the role of the planning and environmental authorities to reconcile development requirements, which will protect, conserve and improve the environmental quality and recreational opportunities in coastal zones.

i Limits of areas under the Town and Country Planning Act

As a general rule the planning system limits the coastal zone in the seaward direction to the high watermark. Above that the authorities have the powers to control the development and use of land under the Town and Country Planning Act. However, in the case of the St. Ann Parish Development Order Area the boundary extends seawards to the island's territorial limits and includes all man made and natural accretions within the area subjecting them to the requirements of the Town and Country Planning Act.

Where development decisions on proposals below the low water mark are outside the scope of the planning system, they are controlled by other Acts such as the NRCA Act and the Beach Control Act.

ii Visual intrusion

Coastal areas are particularly vulnerable to visual intrusion because of the high visibility of development on the foreshore. In areas designated for their historic or natural landscape, development will be limited particularly that which would be usually intrusive.

iii Limitations to development

Where the scope for new development is becoming increasingly limited in undesignated areas of the coast, the opportunities for development should be sought inland. New developments will not be permitted in areas where there would be the need for expensive engineering works, either to protect developments on land subject to erosion by the sea or to defend land, which may be inundated by the sea.

iv EIA required

Development will not be allowed to take place on receding cliffs where erosion is likely to occur during the lifetime of the building. Development proposals which are likely to have significant effects on the coastal environment such as hotels, oil refineries, large power stations, and ports will be subject to Environmental Impact Assessment.

v Management of areas

Various material resources for recreation such as beaches and cliffs make coastal areas a popular destination for recreational activities. These will be balanced and reconciled through appropriate management measures.

vi Mineral extraction

In sensitive and vulnerable areas such as sand dunes mineral extraction will not be supported.

vii Port Development

Small scale port development involves the planning, construction and the operation phases of the development of warehouses, jetties, fuel depots and the construction of minor roads. Such port development will be viewed in a regional context as one development may appear innocuous in a local context but many such developments can represent a significant cumulative environmental impact.

viii Waste management plan

A waste management plan should be prepared and implemented during the development of the port to ensure that all wastes are appropriately handled and disposed of. Secondary containment should be provided for all liquid, hazardous materials such as fuels, oils and other wastes. Special provisions must be made for ship generated waste.

ix Vegetation and habitat matters.

In the course of construction of port facilities, vegetation clearance

and habitat destruction should be minimized as this could have an impact on the ecology of the area resulting in not only local and regional significance but global as well especially if it is a Ramsar site.

x Public use and access

Development and subdivisions along the coast and river banks should be designed so as to allow the public to enjoy the seaside, the river banks and the beaches. For this reason special areas should be left for fishing beaches and for good bathing beaches. An area of seaside park should also be provided in every housing development or subdivision along the coast, between the high water mark and the nearest row of lots. This will add value to the lots within the subdivision and at the same time allow unrestricted passage along the foreshore. What applies to the sea coast should also apply to river banks, where these are large enough to provide public amenity. Maintenance/management charges may be made for these public facilities/amenities.

- xi Development along the undeveloped coast will only be allowed if such proposals would not be detrimental to the environmental quality of the surrounding areas or if it is in proximity to a service centre or adequate services.
- xii Recreational development will be allowed in locations where it can best serve both residents and visitors or where it preserves an area of natural beauty or historic interest.

19.3.2 Standards

i Use Class

The location of public beaches is indicated in Development Orders. The coast of Jamaica is covered by Development Orders and this is one of the features of such orders. The National Environment and Planning Agency also has a list of all public beaches that fall under its purview, which should be consulted where necessary.

ii Access

Access to the coastline of the island is intended except where it can be demonstrated that it is damaging to nature conservation,

national security or impractical. Access should be provided to all public beaches from a public thoroughfare and no development will be permitted on land adjacent to high water mark that would obstruct public access to and along the foreshore. Where possible access roads should be paved to prevent erosion and be motorable although this could increase the area directly impacted by the development. Public amenities must be managed and maintained and a fee may be charged to cover such costs. This is controlled under the Beach Control Act.

iii Height

The height of facilities that should be provided for bathing and fishing beaches should not exceed two storeys. The height of port developments should not exceed two floors.

iv Setbacks

Any development or subdivision along the coast of Jamaica that is not specifically designated as a harbour or industrial site is to be setback from the high water mark. The amount of set back required will depend on the slope of the site, the nature of the substrata and the prevailing oceanographic conditions as well as any plans for seaside park in the area. Some minimum guidelines are given in figure 21, but because of the complexity of the factors involved each application must be considered on its own merit.

v Parking

Parking facilities will be required for both bathing and fishing beaches and the port facilities. The parking design standards in the Parking and Loading Requirements (see Fig.7-12 & 16-19), will apply but the local planning authority can decide on the number of spaces that is required for these two facilities, based upon the level of use. For the port, the requirements for office buildings will apply.

vi Landscaping

Coastal development should be landscaped with plants adaptable to that environment and be such that it enhances the environment and prevents the erosion of beaches and adjoining areas. Parking areas should be provided with trees not only to provide shade for

motor cars but to improve the visual qualities of the area.(see Figs. 16-19). Trees should also be provided in picnic areas to facilitate visitors. It is important that planting conditions should cover landscaping and screening, as well as restoration arrangements.

vii Drainage

Run off from disturbed and unsealed areas should be managed such that erosion and sedimentation of waterways do not occur. This can be achieved through the use of berms to direct and contain water flow during rain, and the use of settling basins. Disturbed areas should be re-vegetated as soon as possible following construction to mitigate hazards and also to prevent mud slides.

19.3.2 Site Planning Considerations

i Blockage of sea view

Development on the seaward side of coastal main roads should be so arranged that there is no continuous wall of buildings screening the view of the sea. The final distance between contiguous buildings will be determined by the planning authority.

ii Fences/Hedges

No hedge or opaque fence should be constructed on the seaward side of any coastal main road in excess of a special height (normally I.5m) without the expressed permission of the local planning authority. In special areas, the local planning authority may request that the fence conforms to certain architectural features.

iii Wetlands/mangroves

No in filling, dredging, cutting of mangroves or other development of a wetland should be undertaken without consulting NEPA.

iv Structures

No fence, hedge or other structure should be erected in any shoreline reservation without the specific permission of NEPA and the local planning authority concerned. Building and structures should be located in such a way that it prevents any adverse effect on the general character of the existing coastline in the area in which it is to be erected.

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Port matters

The main features, size and shape of port development should be designed taking into account the bathymetry sedimentary regime and hydrology of the coastline and any existing waterway. The design of the development should not significantly alter the flow of water, or result in erosion, scouring or increased sedimentation.

Sediment sampling and analysis will indicate contaminants present which could be released through re-suspension. Construction should be designed such that disturbance of sediments is minimized.

vi Infrastructure foundations

The foundations of developments such as roads should be elevated to improve coastal stability and to act as a barrier to surface water run-off.

vii Waste

Construction of port facilities will result in the generation of waste building materials, general and domestic waste associated with construction workers and potentially, hazard waste associated with construction for e.g., oils and solvents. These should be adequately disposed of as they could impact on water quality and potentially contaminate soils. During the operational stage proper solid waste management practices should be employed.

viii Sanitary Facilities

Both the port development and beach facilities will include sanitary facilities which will generate waste water which could impact on coastal areas and should therefore be appropriately disposed of. The prior approval of the competent authority should be had in this regard.

ix Change rooms

Public beaches should be provided with male and female change rooms, bathroom and shower facilities to meet the needs of the public and be equipped to facilitate the physically challenged.(see Figs. 22 & 23).

x Eating facilities

Beach parks should have restaurant facilities and or snack counters in addition to the public sanitary facilities that are to be provided.

19.3.3 Requirements

All public or private beaches being used by the public are to have certified lifeguards during the hours of operation. NEPA should be consulted in this regard.

19.3.4 Application Forms

Approval from the local planning authority and NEPA is required for the port and beach facilities, and applications should be made to the local planning authority for the purpose.

CHAPTER 20

RESORT AND RESIDENTIAL/RESORT DEVELOPMENT

20.0 DEFINITION

Resort and residential resort developments include accommodation in areas allocated for development as resorts and include hotels, resort condominiums, cabanas, guest houses, recreational and entertainment facilities.

20.0.1 Guidelines

These developments may be located on parcels of land within urban areas, on lands designated for the purpose along the coast or on extensive grounds offering a variety of activities outside of urban areas. The establishment of these facilities should blend with surrounding areas in terms of:

- i siting, designing, scale and landscaping;
- ii have limited adverse effect on the environment with regard to noise, traffic, congestion, or destruction of features of interest of the area involved;
- iii do not involve the depletion of the housing stock especially in areas of housing shortage.

20.0.2 Location

Most resort developments are located and will be allowed along coastal areas where the beaches are the main attraction. Very few are located inland. The local planning authority will not grant permission for any development which may negatively affect tourism resources of the island and/or result in situations in which the positive socio-economic effects derived from the project do not outweigh the potential negative effects.

20.0.3 Tourism Facilities

Tourism facilities will be accommodated in areas where man made features are developed as an attraction and in settlement areas where the facilities are available to service this type of activity.

20.0.4 **Pre Consultation Recommended**

Because of where resorts are located it is important that developers discuss their proposals with officers of the planning authorities at an early stage to ensure that problems or requirements are dealt with before the application is made.

20.1 STANDARDS

- 20.1.1 Density
 - i The density for hotel development will be calculated on the basis of the number of guest rooms per hectare. A guest room is a hotel bedroom together with bathroom and all the ancillary accommodation normal in a resort hotel.
 - ii Houses or resort apartments will be based upon the number of habitable rooms per hectare (see definition).
 - iii Factors that will be considered in determining the density of a development are:-
 - The availability of utilities such as water, sewerage facilities, etc.
 - The availability of good transportation links such as roads.
 - The amount of beach frontage available.
 - Whether or not it is prime inland site.
 - The total area of the site.
 - iv Density ranges houses and apartments

Densities for houses or resort apartments will range from a low of 37.5 habitable rooms per hectare (hrph) to a high of 75hrph along the coastal areas depending on the level of infrastructure available and a maximum of 75hrph inland. The ground cover will range from 15 percent maximum and the plot ratio 20 percent.

v Density ranges - hotels

The density of hotels will range from 18.5 guest rooms per hectare in environmental sensitive coastal areas to a maximum of 37.5 guest rooms per hectare in other coastal and inland areas, depending on the level of infrastructure available.

vi Ground cover

The ground cover will be 15 per cent maximum and the plot ratio 15 percent maximum for densities at 18.5 guest rooms per hectare and 20 percent for both at 37.5 guest rooms per hectare.

vii Where the proposal is part of another development such as a golf course, the density will be calculated over the area that the buildings occupy rather than the total site area.

20.1.2 Use Class

In the use classes order a hotel is listed in its own category and is regarded as a boarding or guest house where no significant element of care is provided.

20.1.3 Access

Access points to hotels should be located so as to minimize turning movements across traffic where possible they should be located on service roads where the volume of traffic is less.

20.1.4 Height

Accommodation located on the beach will not be allowed to exceed three stories in height plus pitched roof if desired subject to a ridge height of 12m (40 ft). However, in areas where the hotel is to be located on parcels of land exceeding 4.0 hectares in area higher buildings may be allowed. This will depend on the character and design of the building in relationship to the surrounding areas and other material consideration. Only low rise resort development will be encouraged along coastal areas outside of the built up areas.

20.1.5 Setbacks

Setback from the coast should be in conformity with the guidelines under Port/Beach facilities as the terrain and other conditions along the coast differ. No building should be located within 12 metres of a road boundary and side boundaries should be a minimum of 3.7m for buildings up to three floors. An additional 0.6m is to be added for each additional floor. This could vary depending on the size and location of the site, the character of the surrounding area and the height of the building.

20.1.6 Parking

This should be on site and conform with the requirements set out in the parking standards in terms of requirements and design.

20.1.7 Landscaping

A landscaping plan prepared by a qualified landscape architect should accompany each application. The plan should show:

- i the location of all existing trees, hedges and shrubs, indicating those to be retained and those to be felled;
- ii the position of proposed buildings in the vicinity of trees to be retained;
- iii details of all new tree planting, including species, height, crown, girth and amenity value;
- iv the routes of underground services;
- v existing contours and any proposed alterations to ground level.

During the construction stage all trees that are to be retained should be protected from possible damage. Where appropriate climbing plants should be used on the walls of buildings and trellis work, concrete ballasts, steel frames etc., to provide greenery to the development.

20.1.8 Drainage

A drainage and sedimentation control plan showing measures to control and regulate site drainage is to be submitted with the application. The use of porous materials for surface paving such as decorative paving stones on walkways, roadways, driveways and parking areas that allow for infiltration will be encouraged.

20.2 SITE PLANNING CONSIDERATIONS

Development must satisfy the requirements for ground cover, plot ratio, building height and habitable rooms or guest rooms per hectare whichever is relevant. The standards for guest rooms per hectare is based on normal space standards for central and ancillary facilities in resort hotels. Where these fall below the normal, adjustments will be made by the planning authorities in the number of guest rooms.

The local planning authority may exercise control over issues other than density such as the provision of parking and aesthetic concerns in the processing of applications.

In urban areas, hotels should have a minimum lot area of 0.4 hectare of land for fifty (50) rooms, however, outside of urban areas the requirement is expected to be higher.

20.3 REQUIREMENTS

Where the building is being located along the coast it will be necessary to do an EIA and obtain approval under the Natural Resources Conservation Act before planning permission is granted. Applicants should therefore check with NEPA for guidelines in this regard. For guidelines on the number of plans required, etc., see the section on planning permission.

Where the application is in outline this should be stated and the details should be submitted within the time period given.

20.4 APPLICATION FORMS

Planning permission will be required for this class of development. The requisite forms are available from the local planning authority to which they should be completed and returned. Applicants should ensure that planning permission and building approval are obtained in writing before the development is started.

CHAPTER 21

MIXED DEVELOPMENT

21.0 GUIDELINES

The concept of mixed development can be applied to the establishment of other uses independently in an area other than that predominantly existing or as part of an existing building on the same plot. This involves residential and non residential buildings. The characteristics of industry and commerce are evolving continuously and many businesses can be carried on in residential areas where they do not cause unacceptable disturbance through increased traffic, noise, pollution or other adverse effects.

21.0.1 Purpose of mixed use development

The purpose of this use is to provide an area that fosters attractive landscaped open spaces, and flexibility of development for the welfare of residents and the public.

Planning decision regarding the location of such developments will depend on factors such as the scale of the development, the nature of the use of the site and its location. In areas, which are primarily residential, commercial and industrial activities of an appropriate scale should not be unreasonably restricted where it would not adversely affect residential amenity.

20.0.2 Compatibility

Since a commercial development could be intensified after approval is given and become unacceptably intrusive, the planning authorities will impose planning conditions to safeguard the amenities of such areas. Careful thought will be given to the extent to which new residential development is compatible with other uses and if they should be located near them as the expectations of residents may give rise to pressure to curtail the other uses.

Any commercial use is intended to be a compatible part of the area/neighbourhood that serves the needs of the residential – office uses.

21.1 STANDARDS

21.1.1 Density

Where a mixture of residential and commercial uses are permitted on a site the residential density and commercial intensity permitted for a proposed development will be based on the ratio of uses applied to that specific area. The resulting residential and commercial gross floor areas will then be aggregated and located on the site in accordance with the other requirements. Where the development is on an individual plot building density should not exceed fifty per cent of the site area.

21.1.2 Use Class

There is no specific use class for mixed development. The use classes however, allows uses of the same category in the same building.

21.1.3 Access

Vehicular access should not be placed near road intersections. On double frontage lots, one motor vehicle access only will be allowed and this is on the front street. Where access has to be taken from a side street then there should be none from the front street.

21.1.4 Height

Building heights should not exceed those existing for the predominant uses in the areas in which development is to be located. This could range from single storey in residential areas to ten storeys in office areas. Proposals must not detract from the usual or residential amenities of the area in terms of scale, mass, bulk.

21.1.5 Setbacks

Setbacks should conform with established building lines for front, rear and side yards. Under no circumstances should buildings in a residential area be located on the property boundaries. Where there are no established building lines single storey buildings should be set back a minimum of 3.0m from front property boundary and one metre from side boundaries.

21.1.6 Parking

Car parking provisions will be calculated on a proportionate basis where

applicable and then aggregated. Design of parking bays should conform with the guidelines provided.

21.1.7 Landscaping

All developments including car parks should be suitably landscaped. A landscaped buffer consisting of hedgerow and other trees should be maintained between mixed use buildings and residential buildings and should provide year round screening.

21.1.8 Drainage

Surface water from buildings should be directed into the street drainage system for ultimate disposal.

21.2 SITE PLANNING CONSIDERATIONS

Site development standards for mixed uses on the same lot will be calculated on the basis of a given ratio of uses expressed as a percentage in multiples of 5 per cent, i.e. residential 90%, commercial 10% or residential 65%, commercial 35%.

Only in exceptional circumstances will the commercial component of a development be permitted to exceed 60%. The density of development permitted on the site will be based on the ratio of uses applicable. The resulting floor areas will then be aggregated. Standards for building coverage, site coverage, building height and setbacks will be those applicable to the predominant use. Car parking will be on a proportionate basis.

21.2.1 Example

An example is as follows:

A site of 920msq is to be developed for single family and office use at a ratio of 60 per cent residential to 40 per cent office.

Dwelling units permitted	=	one dwelling unit
Floor area permitted	=	920 x 60% x .5
	=	276m ²
Floor area ratio for office	=	I:0.5
Floor area of office	=	920 × 40% × 0.5
	=	184m ²
Total development on site	=	$276 + 184 = 460 \text{m}^2$

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Maximum site	coverage		=	50 per	cent		
Maximum bui	lding height		=	2 stori	es or 8	.5m	
Minimum sett	oacks (2 storey	vs)					
	Front	=	6 m				
	Side	=	1.5m				
	Rear	=	3m				
Car parking required – residence – I space							
Office		=	<u>184</u>	=	4.6	=	5
			40				
Total n	number of space	ces	=	5 + I	=	6	

Surplus vacant floor space above established shops should be put into beneficial use such as office and/or residential use.

Any addition or alterations to the exterior of a building shall not lessen the residential character of such building.

21.3 REQUIREMENTS

- i All activities including sales shall be conducted entirely within a completely enclosed building and all products shall be sold at retail on the premises.
- ii No second-hand or used merchandise shall be offered for sale, displayed or stored on the premises.
- iii Planning permission is required for developments that do not fall in the same use class. No building, structure, or part thereof shall be erected, altered or used without such permission.

21.4 APPLICATION FORMS

Application forms are available from the KSAC/local planning authority. They should be completed and returned to the relevant agency.

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CHAPTER 22

AIRPORTS AND AERODROMES

22.0 GUIDELINES

22.0.1 Design

The design and layout of an airport is a highly specialized undertaking requiring technical competence in many areas and a thorough knowledge of the regulations and standards of the Civil Aviation Authority and other international aviation agencies. Airports are classified according to the types of aircraft they can accommodate and by the service they provide to the flying public.

22.0.2 Types of Airports

In Jamaica the two types of airport that exist are domestic aerodromes that serve local service flights and international that serves transoceanic flights. The terminal building is the focus of ground transportation and is the generation of a heavy volume of traffic at airports. The area required for an airport will depend on the class, the runway dimensions and placement and the physical characteristics of the site.

22.0.3 Size

The size of an airport is based upon the number of people who are expected to use it, the type of service to be provided and the kinds of aircraft that will be facilitated.

22.0.4 Location

The location of schools, hospitals and other places of public assembly involving a large number of people should not be located in the approach zones of runways as this is the area of most aircraft accidents. Keeping these activities out of this zone will prevent a large number of people being involved in any catastrophic accidents. In addition to the airport site additional lands will be required for safety purposes and to allow for the manoeuvring of aircraft under all conditions and for a buffer zone.

22.1 STANDARDS

22.1.1 Use Class

An airport may be categorized as either a commercial or industrial use and has no specific use class of its own. However, if it is located in a residential area a commercial zoning would offer better control.

22.1.2 Access

Vehicular access is of major importance in the location of airports and aerodromes. Driving times should be about twenty (20) to thirty (30) minutes between airport and business district. A location of about 32km from the main urban centre should allow access within a reasonable time. Access to the site should be from a main road and should be satisfactory to the National Works Agency.

22.1.3 Height

Aerodromes are usually single storey buildings for administrative purposes and facilities for staff and passengers. International airports contain more facilities for passengers, visitors and staff and ranges from two (2) to four (4) storeys. In addition the operator of an airport is allowed to carry out certain developments without planning permission not exceeding 4m in height.

22.1.4 Setbacks

Airports have several buildings used for varying purposes from customs storage to food handling. None of these structures should be located within 12m of a main road boundary.

22.1.5 Parking

Parking both short-term and long-term must be provided for travellers, employees and visitors. Areas should also be provided for taxis, buses and rental cars separate from those mentioned above. The number of spaces to be provided will depend on the size of the airport / aerodrome and how busy they are. The planning authorities should be consulted in this regard. The design of parking bays should be as set out in the parking standards.(see Figs. 7-12 & 16-19).

22.1.6 Landscaping

The areas containing the airport facilities and motor vehicle parking areas should be landscaped. This could be flowering plants and shrubs in planter boxes and trees planted in the ground. A tree shall be provided for every two parking spaces and where appropriate in islands along driveways or separating parking.(see Figs. 16-19). Landscaping should be guided by a landscape plan prepared by a Landscape Architect.

22.1.7 Drainage

Site selected for the establishment of airports should among other things have proper drainage or be able to be adequately drained. All surface water is to be channelled into natural drainage channels and be disposed of so that it does not flood the runway or tarmac.

22.2 SITE PLANNING CONSIDERATIONS

The size of an airport is determined mainly by the length of its runways, which will vary in accordance with the type of aircraft to be accommodated, average temperature, height of airfield gradient of the runways, barometric pressure and prevailing winds.

22.2.1 Terminal Buildings

The runways should be connected by taxiways, aprons where aircraft park while being loaded or serviced, to a terminal building which houses the ground operations except repair and maintenance of planes. The terminal building may consist of a series of interconnected buildings providing different functions. These could range from the checking in of passengers, customs and immigration to administrative and protective services.

22.2 SITE REQUIREMENTS

The size of land required for an airport should take cognisance of the space required to accommodate buildings, hangers, aircraft and automobile parking areas.

- i In selecting the site the following factors should be considered:
 - Topography
 - Subsoil conditions
 - Drainage
 - Local weather conditions

- Land and development costs
- Location
- Flight patterns of other airports in the vicinity
- Accessibility
- ii The site of the airport should be practically level or can be made so at reasonable costs. Sites with nearby hills or with structures in the glide path should be avoided.
- iii An aerodrome with a 762m runway may need approximately 65 hectares of land while an international airport may occupy as much as 20 sq. km (km²) of land.

22.2.3 Locational Factors

Airports are noisy neighbours and can distract from residential property values. They should not therefore be located near residential areas. It is desirable that airports be located such that runways can be lined up with water bodies such as the ocean or other natural open spaces allowing clear zones for take off and landing without having to purchase them. Obstructions such as hills, power lines, television towers, and other vertical erections should be avoided.

22.3 **R**EQUIREMENTS

A relevant airport operator can carry out certain activities within 8 km of an established relevant airport without the need for planning permission.

22.4 APPLICATION FORMS

Application for the development of airports/aerodromes within a Development Order area should be made on the appropriate form available from the local planning authority.

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CHAPTER 23

ABATTOIRS (SLAUGHTERHOUSES)

23.0 GUIDELINES

An abattoir is an industrial activity involving the slaughtering of animals for food production. In this regard it involves the following major activities:

- i Slaughter and carcass dressing of animals;
- ii Receiving and holding of livestock to be slaughtered;
- iii Chilling of carcass;
- iv Transport of processed material;
- v Skin drying.

23.0.1 Design Factors

The planning stage is the best time to design this operation in a way that conforms to legal requirements and to ensure that waste is minimized and contained.

It is necessary that a disposal area be identified in case there is an outbreak of disease. Such an area should be away from watercourses and ground water with soil suitable for digging but also impermeable. Where skin preservation by dry salting is undertaken, the effluent from drying sheds should be segregated from irrigation water to prevent problems with vegetation. Wastes originating from kitchens and offices, dispersed or uneaten feeds and from general maintenance should be recycled or composted.

23.0.2 Waste

- i Options for disposal of treated wastes water should include:
 - Irrigation to farmland, gardens and parks;
 - Disposal to local sewer.
- ii Odours produced from manure and urine in animal holding areas and sale yards can be greatly reduced by scraping up and removing and then washing down the area with a low volume pressure spray.
- iii Manure should be collected daily and stored in vermin-proof containers.

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- iv Skin drying areas should be vented through an odour control system to prevent flies attacking the skins.
- v The surfaces of sales yard, holding pens, unpaved roads and parking areas should be sealed.
- vi Where sludge or other wastes are disposed of by incineration, control measures should be taken to minimize the effect on surrounding land users. These could include the design and operation of combustion and air pollution control equipment that will minimize the emission of air pollutants. Stacks should also be high enough to prevent ground level concentrations of pollutants from reaching undesirable levels.

23.0.3 Time Factors

To avoid complaints from early or late operations, external activities should be restricted to 7:00 a.m. to 6:00 p.m. Monday to Friday and 7:00 a.m. to 1:00 p.m. on Saturdays. Offal and waste animal matter should be received in a fully enclosed building.

23.0.4 Bins

Receival and storage bins should be designed so that they can be cleaned with high pressure hot/cold water.

23.1 STANDARDS

23.1.1 Use Class

Abattoirs are livestock processing activities that involve industrial operations. Although there is no specific listing for them they would generally fall into this category in the Use Classes Order.

23.1.2 Access

The site should be accessible from a permanent road to allow ready transport for both livestock and meat.

Heavy vehicle routes should be chosen to avoid intrusion in residential areas and be restricted from operating during the noise sensitive period.

23.1.3 Height

Usually the processing should not exceed one storey with a minimum height of 4m.

23.1.4 Setbacks

Buildings should be set back far from property boundaries to ensure that operation noises do not cause discomfort to occupiers of adjacent premises and to provide parking spaces for trucks and other motor vehicles.

A minimum of 3m from side and rear boundaries should be adequate for this. However, where waste disposal facilities have to be located on site this distance should be increased accordingly.

23.1.5 Parking

Parking should be provided in accordance with the requirements set out in the Parking and Loading Requirements and parking bays should be laid out in such a manner that they can accommodate the vehicles for which they are intended. Parking areas should be located away from noise sensitive areas and be landscaped. (see Figs. 16-19).

23.1.6 Landscaping

Features such as trees, shrubs, rock walls and grassed areas incorporated into the landscaping will not only help with the visual impact but will also diminish the impact of operational lighting beyond the development site. Trees may also help to control dust and noise pollution from the site. The criteria set out above could be used as a guide in this regard.

23.1.7 Drainage

Contaminated storm water, waste water and wash water should be collected in lagoons and aerated without any off-site run off.

To minimize or prevent contaminated storm water, and waste water, from being deposited onto unloading areas, stockyards and processing plants should be roofed or isolated, or bunding used. Clean storm water should be kept away from contaminated areas and directed to the storm water system. In areas where water is scarce it could be collected for stock watering or washing down areas.

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23.2 Site Pla

Site Planning

A minimum site area of 1800 square metres is required for the construction of an abattoir, however, the land area should be adequate to house all projected activities.

The abattoir should not be located near to a residential area, schools, churches and other public buildings due to nuisance from noise, smell, fumes, etc. Land zoned for housing development and other incompatible uses should also be taken into account.

23.3 WATER REQUIREMENTS

An adequate supply of water should be available for all operations, whether from water mains or rainwater collected from the roofs of buildings. An approximate requirement is 1000 litres per large animal, 100 litres per small ruminant and 450 litres per pig.

Land used for subsurface irrigation or waste disposal need not be within the abattoir boundary, although control over it is necessary.

23.4 SITE REQUIREMENTS

The site to be used should be free draining and not subject to water logging or flooding. In laying out the site due consideration should be given to space for the burial of inedible waste, condemned animals (if necessary) and other related activities. Lairage should be sized to hold the expected daily kill or the holding of stock overnight. Pen areas should be provided as follows:

Species	Area
Cattle	1.7m ² / head
Pig / sheep	0.35m ² / head
Goats	0.25 m ² / head

A single pen for isolating sick or suspect animals should also be provided. Adequate buffer distances from nearby land users are the best way to control nuisance from air and noise pollution.

23.4.1 Buffer Zone

A minimum buffer distance to the nearest residential area should be a minimum of 500m downwind of an abattoir.

All process areas must have concrete floors graded to wash down drains.

23.4.2 Chemical Storage and Odour Control

All chemical storage areas and chemical-bleach odour control equipment must be located on impermeable concrete floors with bunding capable of containing 110 per cent of any spillage.

23.5 ODOUR AND NOISE PREVENTION FACTORS

Where rendering works (melt down of fat) take place the building should be vented to the atmosphere via a discrete stack to allow the installation of odour control equipment. The stack should be at least 3m above the building roof ridge, have an efflux velocity not less than 15m/s, and be fitted with emission sampling provisions. Noise barriers such as screens should be erected around noisy equipment and operations. Noise from abattoir operations should not exceed +5dB (A) for dwellings or other sensitive places and +10dB (A) for commercial places. (Compliance limit levels are measured as the average of the maximum A weighted sound levels adjusted for noise character measured over a 15 minute time interval).

23.6 LAYOUT FACTORS

The layout and orientation of buildings should be used as noise barriers and the natural topography as an acoustic barrier where possible. Animal holding areas should not be located near to residential areas and noise barriers should be implemented to reduce any noise being generated from this source.

23.7 REQUIREMENTS FOR PROTECTION OF FLORA, FAUNA AND HISTORIC SITES

In areas where it is planned to locate an abattoir the flora and fauna should be checked to ensure the protection of endangered species.

Heritage and historical sites and monuments listings should also be checked before a decision is made on the location. The requirements of the Natural Resources Conservation Act should be checked to ensure compliance.

23.8 APPLICATION FORMS

Where the proposal falls within a Development Order area application forms are available from the KSAC/local planning authority to which they should be returned. There is no fee for planning applications but fees are payable to NEPA for Environmental Licences and permits and to the KSAC/Parish Council for building applications.

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CHAPTER 24

OTHER AMENITIES

24.0 GUIDELINES

Industrial areas containing warehouses and other industrial activities developed as an "Industrial Estate" or "Industrial Park" may be required to provide the following:

- i Day Care Centre
- ii Clinic or First Aid Station
- iii Adequate Fire Protection
- iv Pharmacy
- v Postal Agency
- vi Bank
- vii Restaurant/snack counter
- viii Park with trees and benches properly landscaped
- ix Recreation area with adequate facilities

Some of the amenities could be incorporated within one compound and made available to the others.

24.1 LIGHTING AND SECURITY, SANITARY AND GARBAGE DISPOSAL

In addition to the above proper lighting and security of the area is very important. Safe, sanitary and efficient garbage disposal facilities should be installed and garbage collection and disposal should be done on a regular basis.

24.2 STANDARDS

The standards required for the satisfactory development of the above amenities are dealt with under "Institutional Services".

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 25

EDUCATIONAL FACILITIES (SCHOOLS, TRAINING FACILITIES AND DAY CARE CENTRES)

25.0 GUIDELINES

Schools are divided into three (3) categories:

- i basic
- ii primary
- iii post primary

25.1 BASIC SCHOOLS

Basic schools are intended for the age group 2 - 5 years old and should be organized to develop a child's social, physical and conceptual skills and include arts and crafts, story telling, music, etc.

Whilst the need for kindergarten and basic schools are usually met by the conversion of residential buildings it is more satisfactory for sites to be reserved for the purpose in new housing developments. The standard should be one classroom for every 35 persons in the 2-5 age group.

25.2 PRIMARY SCHOOLS

25.2.1 Site Factors

For planning purposes and as a general guide to facilitate the identification and reservation of sites each classroom should be designed to accommodate 35 students in the 6 - 11 age group. As far as possible the sites for primary schools should not only meet the required standards in terms of area but should be suitably configured to accommodate the school buildings and the necessary supporting facilities such as ball courts, and car parking facilities.

25.2.2 Suitability Constraints

Where it is difficult to find the stipulated size and configuration of land the Ministry of Education's technical officers should decide on the suitability of what is available. In order to better utilize and to address different site

constraints, school buildings should be designed so that they can be used jointly with other organizations.

25.2.3 Factors for Consideration

In planning the provision of primary schools, factors such as population characteristics, site area and environmental and traffic requirements should be considered. To reach to school children should not have to walk more than one kilometre or cross any major traffic route, if possible.

25.2.4 Provision of Sites in New Housing Projects

Public or private housing projects should as a matter of principle provide their own primary schools as this would have the merit of minimizing the travelling time for students residing in the area. Where sites are provided in private developments, the developer should consult with the Ministry of Education to determine who should build the school.

25.3 SECONDARY SCHOOLS (POST PRIMARY)

The provision of secondary schools should be based on a standard of one whole day classroom of 35 persons in the 12 - 18 age group.

25.3.1 Site Requirements

As far as possible the site reserved should have adequate area and suitably configured to accommodate the school building and the necessary supporting facilities. Where it is difficult to satisfy this criteria the Ministry of Education could waive the requirements.

25.3.2 Location

The Ministry of Education estimates the need for new primary and secondary schools in relation to population within the catchment areas of existing and proposed new residential development. The need for a new school within a new area can arise from a shortage already existing in an adjacent area even though the new area is not of the size to support it.

25.4 TECHNICAL AND VOCATIONAL TRAINING

There are no fixed standards for technical and vocational training facilities and the demand for these relates to the changing needs of commerce and industry. The site area requirement and design layout for these facilities will be determined on a case-by-case basis.

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25.5 TRAINING FACILITIES

The requirements for post secondary training facilities are usually determined on a national basis. The area requirement and design layout is based upon the size of the institution and should be suitably configured to accommodate the needed facilities.

25.5.1 Location

The following will be used to guide their location:

- i All education facilities should be sited away from areas affected by significant noise. If this is unavoidable, appropriate abatement measures should be considered such as air conditioning of the buildings.
- ii As far as circumstances permit, schools should be located in proximity to public open space and compatible institutions/ facilities such as public libraries, community centres.
- iii Technical institutes and industrial training centres should preferably be located near industrial areas.

25.6 STANDARDS

25.6.1 Density

The floor area ratio for an institutional building should be 0.66 with a plot coverage of thirty-three and one third per cent. This is intended to prevent over development of the site.

25.6.2 Use Class

Education facilities fall within the use class for non-residential institutions along with facilities such as public libraries, public workshop, etc.

25.6.3 Access

- i All educational facilities should be provided with vehicular access that can be used by emergency vehicles, and should be safe from falling objects from neighbouring buildings.
- ii Schools should be so located that any ingress/egress movements

and unloading activities would minimize local traffic congestion.

- iii Kindergartens should be located within 0.4 km from residential areas. Pupils should not be expected to cross any major roads which are not served by pedestrian activated traffic light or grade separated crossing on their way to and from school.
- iv Access should be paved.

25.6.4 Height

Buildings for basic school students should be single storey but that for the other students should be a maximum of three floors.

25.6.5 Setbacks

Schools should be set back from public roads so that students do not enter directly onto them. They should be able to wander around before entering the roadway. The anxiety to leave school could cause them to enter directly onto the main road and into the path of traffic immediately after dismissal.

25.6.6 Parking

On site parking should be provided for staff and students. In situations where this is not possible then parking should be provided in an adjacent property. Space is to be provided on the school premises for the letting off and picking up of students and vehicles should avoid parking in the streets where they obstruct the free flow of traffic. There should be three (3) spaces per class room for staff.

25.6.7 Landscaping

Landscaping should be a part of the school environment. This should consist of trees that can provide shade for the students and flowering plants and shrubs. Play areas should have hard landscaping as grassed areas tend to die out from over use. Car parking areas should be adequately landscaped. At least one tree should be provided for every three (3) parking spaces.(see Figs. 16-19).

25.6.8 Drainage

Drainage should be intercepted from the premises and disposed of before reaching a public road as run off from school premises tends to be very high because of the amount of building coverage and hard surfacing.

25.7 SITE PLANNING CONSIDERATIONS

The minimum land area required is as follows:-

25.7.1 Basic Schools

A minimum of 929msq in urban areas and 2043.8 msq in rural area;

25.7.2 Primary Schools

2 hectares on fairly level ground, including space for at least a football field and a headmasters cottage.

25.7.3 Secondary Schools (Post Primary)

4 hectares of fairly level ground with space for facilities such as football field, running track, staff housing and space for agricultural instruction.

25.7.4 Post Secondary

This is dependent on the size of the facility and the type of training offered and could range from part of an established building to over 20 hectares.

25.7.5 Location

- i Whenever possible, the school building should be located in a site which enables the classroom block to have its longest axis oriented east west so as to minimize the effects of the sum. The open play area and the ball courts of the school shall best be located adjacent to the school building proper.
- ii Schools should not be located close to sources of air pollution or potentially hazardous installations or within landfills. Proposals for purpose built or converted facilities within residential areas will be considered for basic schools if they are suitably located and are of a scale appropriate to the area.

25.8 REQUIREMENTS

Developers in their own interest are advised to ascertain the requirements of the school authorities before embarking on the design.

25.9 APPLICATION

Planning permission is required from KSAC/the local planning authority. Building permission is also required form the KSAC/Parish Council. These should be obtained before the start of construction of the building.

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CHAPTER 26

HEALTH FACILITIES (HOSPITALS, CLINICS, NURSING HOMES, MATERNITY HOSPITALS)

26.0 GUIDELINES

Health centres are graded by the Ministry of Health and should be located within the service centre of developments in proximity to other facilities.

There should be a specialist clinic/polyclinic to offer the necessary support whenever a hospital is built.

26.1 RATIO OF BEDS TO POPULATION

For long term planning purposes 5.5 beds should be provided per 1,000 population in both public and private hospitals. This should take into consideration the need for different types of hospital beds such as acute general, extended care or psychiatric beds.

26.2 HEALTH CENTERS/CLINICS

The provision of health centre services is to be considered in a district context to provide primary health care services including general out-patient and family health services. When providing rural clinics each case should be considered on its merits. Clinics and health centres should be sited centrally within the districts they are intended to serve.

26.3 NURSING HOMES

Nursing homes should be integrated where possible into established residential areas where access can be had to local services.

26.4 STANDARDS

26.4.1 Density

The floor area ratio should be 0.66 with a plot coverage of thirty-three and one third percent.

26.4.2 Use Class

Hospitals, nursing homes, etc, fall under the category of residential institutions in the Uses Classes Order.

26.4.3 Access

Good accessibility to the area served is a major factor to be considered in the location of hospitals and other health facilities. They should be easily accessible by public transport and where possible be sited in association with other community facilities to which residents require daily access.

26.4.4 Height

Clinics and health centres should be single storey buildings while hospitals should not exceed four stories. Nursing homes should be a single storey building.

26.4.5 Setbacks

Buildings should not be forward of any road building line existing for the area in which they are to be located and 1.5m per floor for side boundaries. Buildings in residential areas should conform with the setbacks existing in these areas.

26.4.6 Parking

The requirements should be in accordance with the guidelines in the Appendix. Space should also be provided for ambulance and other emergency vehicles. At nursing homes loading and unloading facility for wheelchair users located in close proximity to the home is also required.

26.4.7 Landscaping

The site should be adequately landscape and in this regard the standards in apartments/town houses and shopping centres should be a guide.

26.4.8 Drainage

The drainage system for the site should be integrated into the public drainage system and surface water should not be allowed to flow onto roadways as this could hamper the movements of pedestrians and motor vehicles.

26.5 SITE PLANNING CONSIDERATIONS

Usually, the minimum lot area for a health centre is 0.2 hectare, but if maternity care is considered the requirement is 0.4 hectare.

The site for hospitals should be approximately 80m² per bed. This includes requirements for other supporting services and associated ancillary facilities such as car parking, loading and unloading areas, and scope for expansion. Nursing homes can be accommodated either in purpose built buildings or in housing developments. They can also be located on the ground floor of multi-storey residential buildings

26.6 Change of Use from Residential to Nursing Home

In changing the use of residential buildings to nursing homes the following factors will be considered:

- i The effects on the amenities of adjoining properties
- ii Suitable private open spaces
- iii Adequacy of off street parking
- iv The size and scale of the facility proposed.

26.7 APPLICATION FORMS

Application forms are necessary to apply for planning permission; the forms are available at the KSAC/local planning authority and should be properly filled out and returned with the necessary drawings.

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CHAPTER 27

RELIGIOUS FACILITIES (CHURCHES, MOSQUES, SYNAGOGUES, ETC.)

27.0 GUIDELINES

- i Religious activities may be located in most areas depending on their acceptability by the community within which the building is proposed. Each application will be treated on its own merit.
- ii Factors affecting planning decision will include lot size, proximity to residential dwellings, traffic requirements, level of noise transmitted, the external appearance of the structure, and the level of support in the area.
- iii The area of the site, its shape and topography should be able to accommodate the building and amenities satisfactorily.
- iv Dumped up land or old factory compounds should be avoided.

27.1 STANDARDS

27.1.1 Use Class

Religious facilities fall under non-residential institutions in the use classes order in the Development Order and reproduced in this document.

27.1.2 Access

All religious buildings should be easily accessible from a public road, and by public transportation.

There should be only one entry/exit cross over point to a main road for vehicular traffic and the gate to the premises should be wide enough to permit entrance and exit. In some locality a pedestrian gate will be allowed from the main road to the church premises.

27.1.3 Height

The height of the building is expected to conform with those existing in the

area in which it is to be located. The maximum height, however, irrespective of the location shall not exceed two floors or equivalent.

27.1.4 Setbacks

Setbacks from residential areas should be a minimum of 2m and in other areas a minimum of 1.2m for single storey buildings and 1.8m for two storey buildings. Setbacks from roadways should conform with the building line existing in the area.

27.1.5 Parking

Parking should be provided off street for motor vehicles at the rate set out in the parking and loading requirements. The spaces should be practical and should conform with the dimensions provided in Figures 7-12. Religious facilities may use the parking spaces of businesses/buildings located in close proximity as excess parking. These businesses, however, should not be carrying on business on the days of worship.

27.1.6 Landscaping

The grounds on which church buildings are located are to be adequately landscaped. Where the premises are small, use should be made of planter boxes with shrubbery outside of the building.

On larger premises trees and hedgerows should be planted along property boundaries.

Car parks are to be landscaped with one fast growing tree per two parking lots and the trees planted where necessary in islands at least 1.2m to 1.8m wide.

27.1.7 Drainage

Surface run-off from the site should be channelled to the nearest public drain and should not be allowed to flow across the street uncontrolled.

27.2 SITE PLANNING CONSIDERATIONS

In new residential subdivisions land should be set aside for church buildings, the lot size areas depending on the size of the population to be housed.

27.3 REQUIREMENTS

Where it is proposed to convert existing buildings and land to a church, permission should first be obtained from the planning authorities unless both uses are in the same "use class".

27.4 APPLICATION FORMS

Application for permission to erect any form of religious building in a Development Order area should be made to KSAC/the local planning authority on the form provided for the purpose. Building permission will also be required from the KSACor relevant Parish Council.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 28

POST OFFICE/POSTAL AGENCIES

28.0 GUIDELINES

Post offices should be provided so that the population that they are intended to serve are within 0.8km, for urban areas and 3.2km for rural areas. Other factors to be taken into consideration are the physical characteristic of the area over which customers must travel and whether the post office is to be the focal point of the area in which they are to be located.

28.1 STANDARDS

28.1.1 Use Class

The postal service falls into the category of shops.

28.1.2 Access

All post offices need direct vehicular access and those which have mail delivery service should be located near public transportation facilities. Access for delivery vans should be provided where possible to the rear of the building.

28.1.3 Height

Free standing post offices should not exceed two storeys in height. However, specialized post offices can exceed this height.

28.1.4 Setbacks

When post offices are located in residential areas they should maintain the character and setbacks established in the area. Sufficient space should be left at the rear and side of the building to facilitate parking of delivery vans.

28.1.5 Parking

Large post offices require a compound for loading and off loading of mail vans used in the collection and delivery of mails in secure conditions in addition to what is required for public use. Public parking should be provided in accordance with the standards set out in the parking and

loading requirements and Figures7-12. For free standing buildings this should be provided on site but buildings in mixed-use development should share this facility.

28.1.6 Landscape

Landscaping should be provided where it is feasible to do so, especially for freestanding buildings. Planter boxes could be placed on the outside of buildings with limited space and car parks should be provided with quick growing shade trees.

28.1.7 Drainage

Adequate drainage facilities should be provided for the site to the satisfaction of the National Works Agency and the KSAC/local planning authority.

28.2 SITE PLANNING CONSIDERATIONS

- i Post offices can be located on individual sites or can be incorporated in private buildings that are located relative to the area they are to serve. The office premises should always be completely self-contained with no direct access to non-postal accommodation.
- ii In multi-storey buildings the office should be located on the ground floor since they need direct vehicular access.
- iii Minimum site area for freestanding post offices should be 557.0msq.

28.3 REQUIREMENTS

Post offices are buildings that are used regularly by the handicapped. Adequate provision should be made for them especially when the facility is located in buildings providing other services.

28.4 APPLICATION

Post offices need planning permission that should be obtained from the KSAC/local planning authority.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 29

LIBRARIES

29.0 GUIDELINES

- i Libraries should be located where they are accessible to the largest number of potential users.
- ii A central location would be in a shopping centre where there is a heavy concentration of commercial activities, parking facilities and access to public transportation.
- iii A library should be in a prominent location where it can attract a large number of persons. They should not be located in remote and uncongenial locations such as civic centres. Some may be located in separate buildings while others could be located in rented buildings or shared government buildings.

29.1.1 STANDARDS

29.1.1 Use Class

Libraries fall into the non-residential institutions category in the Use Classes Order.

29.1.2 Access

Access should be easy from public transportation and to motor vehicles and pedestrians.

29.1.3 Height

Main library buildings should not exceed two floors in height but branch libraries should be a single storey.

29.1.4 Setbacks

Setbacks should be in accordance with what is existing in the area in which they are to be located. Setbacks from road boundaries should be adhered to.

29.1.5 Parking

Parking should be provided for service vehicles, bookmobiles, staff and the

public. This should meet the guidelines provided in the parking and loading requirements and Figures 7-12 & 16-19.

29.1.6 Landscaping

Where possible, the site should be landscaped to the satisfaction of the local planning authority.

29.1.7 Drainage

Guidelines are provided in the section on drainage. This should be carried out in such a manner as to avoid flooding of the site and adjacent streets.

29.1.8 Noise

Libraries need a noise free environment. Although easy access is a requirement they should be located away from noise producing sources. Where this is impossible then the building should be air conditioned and constructed in such a manner that outside noise can be isolated.

29.2 SITE PLANNING CONSIDERATIONS

The library should be located at an intersection on level site that is suitable for a street entrance and expansion of the facilities. The size of the building can vary with the population involved and the type of service provided.

Branch libraries can be located in shopping centres, while others could be in a quiet semi-rural centre.

29.3 REQUIREMENT

Irrespective of the nature of the library they all need to be located in a quiet environment.

29.4 APPLICATION FORMS

Statutory approval is required and this can be obtained from the KSAC/local planning authority.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 30

PUBLIC SANITARY FACILITIES

30.0 GUIDELINES

The following establishments are required to provide sanitary facilities for their patrons.

- i Any place of public assembly (including parks)
- ii Any building or part of a building where the major use or occupancy is the regular provision of food or drink for consumption by the public on the premises or in a drive-in service system
- iii Any shop, store or market with more than 500m² of sales floor area.
- iv Any building providing more than 50m² of public waiting place
- v Gas stations with four (4) or more service pumps
- vi Public parks

Where facilities for the public are required, they shall be additional to and separate from those required for employees and shall be provided and maintained in a clean condition.

The number of public facilities to be provided in drive-in cinemas, drive in restaurants or similar establishments shall be based on three (3) persons for each parking bay.

30.1 STANDARDS

30.1.1 Access

Access to public sanitary facilities in parks and playgrounds should be by means of a paved footpath or walk way. In commercial or office buildings they should be located in the lobby areas or at the end of pedestrian corridors, with adequate circulation space. Access should never be through private offices or secluded areas.

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30.1.2 Height

The height of individual facilities should not exceed 2.4m from finished floor level to the underside of the roof. Those in building and structures should conform with the floor heights for those buildings.

30.1.3 Setbacks

Individual or free standing structures should be set back from roadways in accordance with any building lines existing in the area and if any is located near by it should be isolated from residential properties.

30.1.4 Parking

The parking requirements will form a part of what is required for the structure or area that houses the facility.

30.1.5 Landscaping

In parks and recreation areas, the landscaping provided should take into consideration the location of sanitary facilities. They should be screened from public view but not in such a way as to compromise the security of the area.

30.1.6 Drainage

In public parks drainage should be such that surface run-off can be absorbed in grassed areas. Excess water will be channelled to a central drainage system.

30.2 SITE PLANNING CONSIDERATIONS

Public sanitary facilities should be designed so that they satisfy the criteria listed below.

30.3 REQUIREMENTS

The requirements outlined above should be designed so that they can accommodate the handicapped. These requirements are outlined under "Special needs."

30.4 APPLICATION FORM

Where these facilities are included in other buildings permission would have been obtained for them with those buildings. Free standing buildings would need to apply for planning permission.

30.5 MINIMUM REQUIREMENTS FOR EMPLOYEE SANITARY FACILITIES

No. Male Employees	W C's	Urinals	Lavatory Basins	Showers Male/Female		WC's	Lavatory Basins
1 - 10	1	-	1	-	1 - 10	1	1
11 - 30	1	1	2	12	11 - 30	2	2
31 - 45	2	1	3	1	31 - 45	3	3
46 - 60	2	2	4	1	46 - 60	4	4
91 - 120	3	3	6	1	91 - 120	6	6
121 - 150	4	3	7	2	121 - 150	7	7

Notes:

Plus 1 urinal for each additional 1 to 60 persons

1 WC for each additional 31 to 60 persons

1 Lavatory basin for each additional 1 to 60 persons

Plus 1 WC for each additional 1 - 30 persons, 1 - lavatory basin for each additional 1 - 60 persons.

30.6 MINIMUM REQUIREMENTS FOR PUBLIC SANITARY FACILITIES

i	General use or	occupancy (males)	
No. of Males	WC's	Urinals	Lavatory Basins
1 - 30	1	1	1
31 - 120	2	1	1
121 - 240	3	2	1
241 - 360	4	2	2

Notes: Plus 1 urinal for each additional 1 to 200 persons 1 WC for each additional 1 to 200 persons 1 Lavatory Basin for each additional 1 to 300 persons

ii	General use or occupanc	y (females)
No. of Females	WC's	Lavatory Basins
1 - 30	1	1
31 - 120	2	1
121 - 240	3	2
241 - 360	4	2
Notes: Plus 1 WC for ea	ich additional 1 to 100 persons	

1 Lavatory Basin for each additional 1 to 200 persons

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iii	Service of Food or	Drink (Males)	
No. of Males	WC's	Urinals	Lavatory Basins
1 - 30	1	-	1
31 - 60	1	1	1
61 - 90	1	1	1
91 - 120	2	2	2
121 - 180	2	3	3

Notes: Plus 1 Urinal for each additional 1 to 240 persons 1 WC for each additional 121 to 240 persons

1 Lavatory Basin for each additional 1 to 240 persons

v	Service of Food or Drin	ik (females)
No. of Females	WC's	Lavatory Basins
1 - 30	1	1
31 - 60	2	1
61 - 90	3	2
91 - 120	4	2
121 - 180	5	3

Notes: Plus 1 WC for each additional 1 to 120 persons 1 Lavatory basin for each additional 1 to 240 persons

v	Shops, S	Stores, Markets (males)	
Sq. ft. of sales area	(m^2)	No. of Fixtures	
500 - 1000		1 WC	
46 - 93		1 Lavatory basin	
1000 - 1500		1 WC	
93 - 139		1 Urinal	
		1 Lavatory basin	
1500 - 2000		2 WC's	
139 – 186		1 Urinal	
		2 Lavatory basins	
2000		2 WC's	
186		2 Lavatory basins	
		2 Urinals	

vi	Shops, S	Stores, Markets (females)	
Sq. ft. of sales area	(m^2)	No. of Fixtures	
500 - 1000		1 WC	
46 - 93		1 Lavatory basin	
1000 - 1500		2WC's	
93 - 139		1 Lavatory basin	
1500 - 2000		3 WC's	
139 - 186		2 Lavatory basins	
Over 2000		4 WC's	
186		2 Lavatory basins	

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vii	Gas Station (males)
2 or more pumps	1 WC and 1 Lavatory basin
viii	Gas Station (females)

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CHAPTER 31

SPECIAL AMENITIES (DAY NURSERY)

31.0 GUIDELINES

A day nursery is intended to provide care for children up to two years old and is usually located in a residential area often in a converted building. The factors that will be considered in determining the establishment of a child care facility in a residential area are as follows:

- i The suitability of the site and building for the purpose;
- ii The size and nature of the facility proposed;
- iii The effects on the amenities of neighbouring residents;
- iv The availability of easy access to public transport and the availability of a save and convenient area for dropping off and collecting children;
- v The adequacy of the local traffic circulation system and local traffic conditions;
- vi Use of access for all residents

31.1 STANDARDS

31.1.1 Use Class

Day nursery falls into the non-residential institutions category of the Use Classes Order.

31.1.2 Access

They should be centrally located within a residential area and be easily accessible to the intending population.

31.1.3 Height

Day nurseries should be centrally located in single storey buildings, where it is easy to discharge the children into an open area in case of an

emergency. Upper floors are not recommended even though they may have easy ground access.

31.1.4 Setbacks

These should conform to what is existing in the area.

31.1.5 Parking

Long term parking spaces are not required as parents or guardians are not expected to spend any extended time on the premises. A minimum of two spaces along with those for staff operational purposes will be required. A pick up and drop off area for vehicles should also be provided.

31.1.6 Landscaping

Should be in accordance with the requirements for residential development.

31.1.7 Drainage

Should be as set out in drainage facilities

31.2 SITE PLANNING CONSIDERATIONS

In selecting a site for a day nursery whether the building is already constructed or it is to be constructed, regard must be given to the health and safety aspects of the premises. The facility should be located away from such uses that would have excessive noise, fumes, and smells such as petrol stations and refuse dumps.

The premises should be properly ventilated and well lighted and each room should have a window space equivalent to at least one tenth the size of its floor area.

Large detached properties at/near the entrance to housing developments provide the most suitable properties for conversion. Other less suitable sites will be considered on their merits. Applicants should reside on the building where a childcare facility is to be located.

31.3 REQUIREMENTS

Most day nurseries in Jamaica are located in houses in residential areas. Planning permission is required for a nursery including the use of a house as a nursery. People interested in establishing these centres should discuss the possibility with the residents and if they receive the support they can apply for planning permission.

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CHAPTER 32

ENTERTAINMENT FACILITIES

32.0 GUIDELINES

Entertainment facilities such as night clubs, cinemas, theatres, amusement arcades, help to increase night time activities that keep the streets occupied in an area and will be encouraged as long as the use is in keeping with the existing scale of the building and pattern of development. Noise at the boundaries will be carefully assessed and monitored and building plans will have to show proper insulation at the time of submission.

Other effects of the development on the amenity of nearby residents such as hours of operation, general disturbance especially the movement of cars, litter etc., will be assessed prior to the granting of planning permission and conditions will be imposed to control these if necessary. The KSAC/local planning authorities will strictly enforce such conditions. Planning applications will be assessed against the need to safeguard the vitality and viability of shopping and other commercial areas and to maintain a suitable mix of retail businesses. This assessment is usually done before permission is granted.

Large leisure complexes such as cinemas will be examined on their merits.

32.1 STANDARDS

32.1.1 Use Class

Entertainment facilities fall in the category of assembly and leisure with indoor and outdoor sports or recreation not involving motorized vehicle. The change of use of any of these activities to entertainment facilities do not need planning permission.

32.1.2 Access

Locations for night time activities, should wherever possible be near to or have easy access to main thoroughfare and public transportation routes. This will facilitate the free flow of traffic and easy movements of pedestrians.

32.1.3 Height

The height of the building will depend to a great extent on the nature of

the activity and its location. Night clubs to be located in existing multistorey buildings should be on first or the second floor to allow easy evacuation in the case of an emergency and be one storey where they are purpose built, freestanding buildings. This applies to amusement arcades as well. Theatres should be single storey whilst freestanding cinemas are to be a maximum of two floors. The final height will be decided on by the local planning authority based upon the design of the building under no circumstances should the height exceed three (3) stories or its equivalent.

32.1.4 Setbacks

The location of the operation will decide the setbacks. Where the development is adjacent to residential buildings due regard has to be paid to the privacy and other amenities enjoyed by homeowners. To ensure the least amount of disturbance buildings should be located at least 1.5m from side and rear property boundaries.

A minimum of 6m from the front property boundary will be required. In no circumstances should the erection of buildings containing these activities be forwarded to any existing established building line or conflict with one which may be determined whether commercial or residential.

32.1.5 Parking

Parking should be provided on site or in nearby parking areas. No vehicular parking should take place on the street unless the street is designed for this purpose as this could cause congestion in the area.

Developers should be guided by the requirements in the section on parking. In residential areas parking should be to the rear of the premises away from bedroom windows in adjacent properties.

32.1.6 Landscaping

Shopping centres and malls should be landscaped as set out in this document so that if the activity is in these locations no additional landscaping will be required. Purpose built freestanding building should however, have its own landscaping which should be in accordance with the requirements for commercial development. Residential area facilities such as health clubs should have hedgerows to the side and front to protect the residential amenities of the area.

32.1.7 Drainage

Drainage from any development site should be intercepted and disposed of in a manner satisfactory to the National Works Agency or the local authority. Drainage should not be allowed to flow uncontrolled on roadways as this could cause flooding with its hazardous effect.

32.2 SITE PLANNING CONSIDERATIONS

New and converted buildings must be designed so as to prevent noise escaping from the building. All buildings should have emergency exits clearly marked and lighted at all times. There should be lighted arrows showing the direction to the exits. Fire fighting equipment should be strategically located and easily accessible to staff and patrons. Adequate provision for the storage, collection and disposal of refuse should be provided. The design of the façade and advertising signage and lighting shall respect the character of the street and buildings.

32.3 REQUIREMENTS

Planning permission will be required to change to entertainment facilities the use of any building which is not in the same use class. This permission should be obtained before the change occurs or legal action could be taken against the developer, resulting in a delay of the project.

Approval from the Fire Department should also be obtained and submitted to the KSAC/local planning authority along with the application to avoid delay in its processing.

32.4 APPLICATION FORMS

Where planning permission is required the application should be made to the KSAC/local planning authority and approval obtained in writing.

NATIONAL ENVIRONMENT AND PLANNING AGENCY

CHAPTER 33

CULTURAL AND COMMUNITY CENTRES

33.0 GUIDELINES

Cultural centres refer to the physical accommodation for the undertaking of activities that include but are not limited to venues for dance, drama, music and performance of the visual arts. These may be in exhibition halls, studios, theatres, etc.

33.0.1 Needs

The provision of cultural venues should be determined on the basis of needs and will be based on the following:

- i Existing facilities by public and private sectors, and their level of usage. New provisions should be complementary with existing ones
- ii Views of community groups
- iii Development plans for new venues

33.0.2 Types of Areas to be Used for Cultural/Community Use

- i These centres will be established on a national and local basis. Centres at the national level will serve both residents and visitors while those at the local level will serve the needs of local residents, school community groups, etc. In the planning of commercial, hotels and office development the inclusion of facilities for cultural activities will be encouraged.
- ii The use of large common circulation spaces such as lobbies and foyers within public and private buildings will be encouraged for arts activities on a temporary basis. In the planning of public outdoor spaces such as open space, waterfront promenades, the provision of space for exhibitions and performances will be encouraged, subject to there being acceptable traffic impacts.
- iii The use of abandoned buildings for the performing arts will be allowed where they have no detrimental effect on adjoining premises.

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33.0.3 Uses of Community Centres

Community Centres provide a focal point for community activities undertaken by all age groups, including activities such as meetings of local community organizations, social group activities, training courses, recreation and sport activities. They should be constructed so that they can provide temporary shelter for people in need during times of national disasters or emergency situations.

Community centres should be designed for multi-purpose functions to accommodate the various activities for which they are intended.

33.0.4 Planning Requirement

Community centres should be established as part of the amenity requirements for new housing developments. Where the need for a community centre exists and the building cannot be provided by the residents then selected school halls could be used on a temporary basis for the purpose.

33.1 STANDARDS

33.1.1 Use Class

Cultural and community facilities fall under the category of non-residential institutions in the use classes order and do not need planning permission if they are located in a building in the same use class.

33.1.2 Access

- i Accessibility is a key criterion in selecting locations for the siting of cultural venues as this influences the level of participation by artist and audiences. Where possible they should be located in close proximity to public transportation routes and main arterial roads.
- ii Community centres should be located so that they are easily accessible by foot or by motor vehicles to the population they are intended to serve.

33.1.3 Height

Buildings for cultural and community facilities should not exceed one storey. However, balconies and basements will be allowed where site conditions are appropriate.

33.1.4 Setbacks

Community centres should be set back from boundaries so that they do not intrude on the privacy of adjoining neighbours. Advice should be sought from the local planning authority in this regard. However, where there is the possibility of environmental problems from adjacent properties setbacks from nearby roads and the use of landscaped open space should be used as a buffer.

33.1.5 Parking

- i Adequate parking for goods, vehicles and private cars should be provided on site or in close proximity to a cultural centre. The amount of parking required will depend on the scale of performance, patrons, performers and facility staff involved. Based on the scale and nature of the activities at a venue, efficient loading/unloading facilities will be necessary for the transportation of props.
- ii Community centres will need parking facilities to accommodate the vehicles of community members attending meetings and those who are attending training sessions. In all cases parking requirements will be guided by the provisions in the parking and loading guidelines and the local planning authority (see Figs.7-12 & 16-19).

33.1.6 Landscaping

Where necessary this should be to the satisfaction of the local planning authority, and should however, be used as a buffer between the site and unneighbourly development.

33.1.7 Drainage

This should be in accordance with any drainage plans for the area or to the satisfaction of the appropriate authority. The site should be graded so that the run-off is directed to the nearest drainage channel in the area.

33.2 SITE PLANNING CONSIDERATIONS

- i Location
 - Cultural centres should be located at a prominent location

within reasonable commuting distance from residential areas, and should be accessible by public transportation. They should be in close proximity to hotels, tourist attractions and main shopping areas to facilitate overseas visitors.

- Facilities to serve local residents should be located in close proximity to work places and within walking distance of schools and community facilities.
- The comprehensive planning principle to be adopted is achieving a critical mass of entertainment facilities supported by mixed commercial facilities and residential uses.

ii Design

- Specialist designers should be employed in order to adequately cater for the functional requirements while achieving a high quality of aesthetic design of major venues. The provision of catering facilities for patrons should be a part of the site development process.
- Community centres should be integrated into and form part of a comprehensive development of a residential area. A community centre should include a multi-purpose hall, a stage, male and female dressing rooms, toilet facilities, and a small kitchen. The facilities to be provided and the size will be dependent on the size of the lot and the population.

33.3 REQUIREMENTS

All cultural and community centres should cater for the special needs of the disabled and elderly. Tamps with handrails should be provided to the stage and toilet facilities, and car parking should be reserved for the handicapped.

33.4 APPLICATION FORMS

Planning permission should be obtained from the local planning authority, although one may argue that it is a community facility and should not be required.

CHAPTER 34

BURIAL FACILITIES CEMETERIES/CREMATORIA

34.0 GUIDELINES

There is a need to provide lands for cemeteries and to provide guidelines for their establishment as many of the public cemeteries in larger urban centres are full or almost full. This has lead to a demand for private cemeteries often on good agricultural lands, thus creating a strong competition between the two uses.

There are however, strong objections to the siting of cemeteries on Classes I and II agricultural lands and only in exceptional circumstances will cemeteries be sited on lands with high agricultural potential.

Cemeteries should not be sited on good agricultural lands, nor should they be placed in environmentally sensitive areas; sites that can be considered as part of the passive open space will be considered.

Wherever it is practical, new cemeteries for urban areas should be sited at the edge of the built up urban area with adequate land space to accommodate expansion.

In areas with high water table, cemeteries shall be sited such that the underground water resources being tapped for domestic and other uses are not affected by pollution from the cemetery. They should therefore be sited downstream of wells and other intake points.

34.1 PREFERRED SITES

Preference will be given to the siting of cemeteries on large tracts of land at major transportation interchanges, etc., that would normally be rendered sterile for agricultural or other urban use, because of location.

34.2 SPACE ALLOCATION

Traditional cemeteries utilize a substantial amount of land space. There is a need to efficiently utilize the available land resources and not commit increased amounts of land to cemetery expansion at a rapid rate. The provision of adequate public and private cemeteries and crematoria within urban areas is therefore an important issue in view of the strong cultural attachment to family plots. In order to more effectively utilize the land allocated to cemeteries, however, the

development being undertaken in cemeteries should be varied with a mix of interment methods being promoted. Double and triple vaults and other space saving methods of interment should be used as a matter of course.

Where an area has been included within the urban limits of a defined urban centre no burial shall be allowed in family plots instead burials shall be restricted to cemeteries.

Between 50 - 60 percent of the cemetery space in large cities is to be used for interment. Of the acreage devoted to interment in new cemeteries 70 percent shall be used for burial and 30 percent for cremation. Vaults, monuments and tombs shall be provided in the area devoted to burials/interment. New public cemetery provision shall be at the rate of 40 hectares for every 100,000 population. In the largest cities, between 40-70 hectares of land shall be allocated or reserved for cemetery space.

34.3 MONUMENTS/INTERNMENTS

Multiple interment in monuments at a height of no more than 3.6 metres (12 feet) corresponding to 1.5 to 2 stories above ground shall be required where the soil can accommodate these structures in an effort to reduce the use of space at ground level.

Monuments shall be constructed in such a manner that the span (length) do not exceed the maximum length at which the material (compressive / tensile) strength would be exceeded in the event of an earthquake.

Depth of interment/burial for adults in ordinary tombs is 2 to 2.4 metres and 1.5metres for children under 10 years old.

34.4 CEMETERY OPERATIONS

Cemetery operators should seek to encourage alternative methods of disposal of bodies such as cremation. A National policy is required on cremation in support of this proposal.

Crematoria will be permitted as an accessory use to cemeteries and shall be governed by Public Health regulations with each application being accompanied by a site plan, the type of retort proposed and all other technical information.

34.5 STANDARDS

34.5.1 Use Class

There is no special use class for burial facilities. However, land use and zoning plans in development orders identify areas for public cemeteries.

34.5.2 Access

- i Public cemetery sites shall be easily accessible by car and buses and should be no more than 5 km from the last occupied house. Access roads to proposed cemeteries should be a minimum width of 12.2 – 15.3 metres and should be able to accommodate the increased traffic volumes without causing existing residential developments, near to which they may be located, to suffer traffic congestion.
- ii Where the access road is inadequate the development will not be allowed unless the developer undertakes to bring it up to required standards.
- iii Internal access ways to vaults shall be of sufficient width to allow for passage of the casket by pallbearers as well as to provide access pathway for visitors without any obstruction. A width of 1.5m should be adequate for this purpose.

34.5.3 Height

Multiple interment in monuments at a height of no more than metres corresponding to 1.5 to 2 stories above ground will be encouraged where the soil can accommodate these structures in an effort to reduce the use of space at ground level.

34.5.4 Setbacks

Many normal persons do not like to face the fact of death, or to be reminded of it, and will have a disinclination to live in the vicinity of a cemetery. Vaults/graves should therefore be located at least one (1) metre in from property boundaries to housing developments and the area should be profusely landscaped to make the cemetery unobtrusive. Adherence should also be paid to building lines along main roads as graves once established are not easily removed if there is a breach. Where feasible the burial ground could be set back at least seven metres in from the road to allow visitors to park their cars.

34.5.5 Parking

Adequate on site parking should be provided within the curtilage of the site based on a standard to be agreed upon with the local planning authority depending upon the developed cemetery space. The parking provided shall be properly identified on ground and should include properly marked parking bays for buses, hearses and the handicapped. A layout of the proposed parking as well as the expected phasing of the development must be submitted with the application to develop the cemetery.

34.5.5 Landscaping

Cemeteries properly landscaped will be considered as part of the open space requirement in an urban area providing land for passive recreation. In this regard:

- i Cemeteries should be suitably landscaped with trees, ponds, grass and other landscaped features with no erection of tombs or tomb stones above the finished ground level.
- ii Access roadways should be lined with trees.
- iii Between 30 40 per cent of the land in a cemetery should be used for roads and gardens.

All applications for cemeteries should be accompanied by a detailed landscaped plan that the developer will be expected to adhere to.

34.5.7 Drainage

Cemetery sites should have the capacity to be drained. Surface run-off should be channelled into pits designed for the purpose where it will dissipate through percolation and evaporation. Excess run-off should then be disposed of in the nearest storm water channel or gully.

34.6 SITE PLANNING CONSIDERATIONS

34.6.1 Location

No burial shall take place within 61 metres (200 feet) of any stream contributing to a public water supply, or any well, tank, cistern or pond.

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34.6.2 Soils

The cemeteries shall be sited on soil that is easily excavated and on soil of clay, sand or similar material.

34.6.3 Hazard Risks

Cemeteries shall not be sited in locations subject to flooding or with high erosion hazard. The depth to ground water shall be no less than between 2.5 to 3 metres for sites to be used as cemeteries.

34.6.4 Facilities

The following facilities should be provided at cemetery sites:-

- i Place for sale of flowers and wreaths
- ii Sanitary facilities for men and women (two toilets for men and 3 for women)
- iii Meeting place/hall for visitors/mourners
- iv Small chapel for large public and private cemeteries in larger urban centres.

34.6.5 Reopening of Graves

It is permissible to reopen a grave in order to bury a member of the same family but a space of at least one foot above the previous burial must be left. Grave spaces must be clearly and permanently marked to indicate the location of an individual grave at any time.

34.7 REQUIREMENTS

34.7.1 Areas Covered by Development Orders

In areas with a Development Order where the proposed cemetery does not conform to the land use zoning, applications submitted for cemeteries shall be referred to the Town and Country Planning Authority (TCPA) in accordance with Section 12 (1a) of the Town and Country Planning Act.

34.7.2 Assessment Considerations

The assessment of applications for a cemetery by the planning authority

shall take into account any Development Order and other material considerations including the views of the public/community.

34.7.3 Other Acts to Apply

Where a proposed cemetery is located in an area that is protected under the Jamaica National Heritage Trust Act, the planning authority shall refer such applications to that body. Similarly where a proposed cemetery is to be located in a conservation/protected area, the application shall be referred to the National Environment and Planning Agency (NEPA) in accordance with the requirements of the Natural Resources Conservation Act.

34.8 APPLICATION FORMS

Application forms are available at the offices of the KSAC/local planning authority to which the completed forms with the necessary plans should be returned. This is a full application and should conform to the requirements for such.

CHAPTER 35

FAMILY BURIAL PLOTS

35.0 GUIDELINES

Although Jamaicans have a cultural taboo relating to the location of burial grounds, in rural areas most family members are laid to rest in family plots in close proximity to the dwelling house.

35.0.1 Location Factors

- i In locating these burial grounds attention needs to be paid to the environmental and physical characteristics of the area. They should not be located within 61m of any stream contributing to a public water supply system, nor to any wells, tank, pond, springs.
- ii Burial grounds should not be located in areas subject to flooding or with high potential for erosion. On residential lots fronting onto main roads regard should be had for main road improvements and therefore they should not be located within road boundaries or proposed road reservations.
- iii The construction of vaults and sepulchres should meet the standards of the health authorities.
- iv Graves should not be sited in the middle of properties but to a location at the side where they can be easily subdivided from the main property should the need arise. Rather than having several individual burial grounds, families should organize to be buried in one location on one property.

35.1 STANDARDS

35.1.1 Use Class

This activity is not mentioned in any of the use classes order.

35.1.2 Access

Adequate access ways should be allowed to graves. In some situations these may not be motorable and only pedestrians can traverse the route.

In such circumstances caskets will have to be conveyed by pall bearers.

35.1.3 Setbacks

Under no circumstances should any grave be located nearer than 3.5m from any dwelling house or one metre from any adjoining property boundary.

35.1.4 Parking

It is not essential to provide parking on a permanent basis. In most situations this will only be necessary during a funeral and may occur along the street or on vacant space in the vicinity of the interment.

35.1.5 Landscaping

Burial grounds landscaped with shrubbery and flowering plants enhance the environment, and should be encouraged.

35.1.6 Drainage

Drainage outfalls or gully course should be avoided as during floods bodies may become exhumed. This could result in a health risk which could endanger the whole community. The same could occur on steep and unstable slopes especially during the rainy period.

35.2 SITE PLANNING CONSIDERATIONS

Private burial grounds should only be established on private lands with a minimum area of 0.4ha². The terrain of the site should be such that it is possible to establish a grave within the standards set by the public health authorities. The depth of internment /burial for adults in ordinary graves is to be 2 to 2.4m. For children under 10 years the requirement is 1.5m. Multi-burials will be allowed in the same grave at a minimum of 1 foot apart but this is not encouraged.

35.3 REQUIREMENTS

Where the facilities of a public cemetery are available residents are required to use these facilities to bury their dead. The KSAC/local planning authority may take action to ensure this is adhered to.

35.4 APPLICATION FORM

It is not necessary to obtain permission from the planning authorities for individual burials.

CHAPTER 36

TELECOMMUNICATIONS NETWORKS - TELEPHONES

36.0 GUIDELINES

Telephone systems have different antenna types, siting needs and other characteristics that are regulated by the planning authorities. The principal systems are:

- i Fixed link systems which operate through cable connections (copper wire or optical fibre) and radio signals through line-of-sight antennas.
- ii The trunk networks may use fixed radio links as well as underground or above ground cable. These radio links require the provision of radio relay stations. A station usually consists of a small building to accommodate the radio equipment and a tower supporting a number of antennas.
- iii Radio links via satellites are also a form of fixed link communications with a single antenna pointing towards a satellite in orbit over the earth, or, in the case of "satellite earth stations" a number of antennas pointing at a number of satellites.

36.1 ANTENNA SYSTEMS

This type of antenna system should not be confused with satellite television antenna because although they look similar, they provide different functions.

36.1.1 Fixed Wireless

Fixed wireless access provides a different sort of wireless distribution, that is the point to multi-point distribution of information. Instead of using wires to make the connection to residential facilities etc. narrow band fixed wireless access is used. However, they generally need to have line of sight to the served premises. A multipoint antenna is located at a central point with a circle of point radio antennas which do not need to be large and should be discreet, freeing the central point.

36.1.2 Telecommunications Cables

Where feasible telecommunications cables should be placed underground. Overhead cabling should provide access to all likely service/utility providers.

36.2 BROADBAND TELECOMMUNICATIONS CABLE

Structures associated with broadband telecommunications cabling should be designed for minimal impact and shall be located in the least visually noticeable position having regard to operational/access requirements.

36.3 Use of Poles

Where lines have to be placed on poles they should be sited so as to allow easy and economic means of road and sightline improvements and not obstruct pedestrian movements.

Where possible installations should utilize poles that are already in place and used for electricity infrastructure.

36.4 STANDARDS

36.4.1 Use Class

This use is not specified in the use classes order and is known as "sui generis".

36.4.2 Access

In built up areas the system should be located where easy access is available from main thoroughfares. However, because of the need to have direct line of sight, the poles can be erected in elevated areas in the rural parts where access is not readily available from roads, etc.

36.4.3 Height

Fixed – link towers should not exceed 60m in height and antennas can be located on buildings or other structures. The antennas are usually round "dishes" with typical diameters of 0.3, 0.6 and 1.2 metres although reflectors can be of other shapes and sizes.

36.4.4 Setbacks

The setback of antennas and equipment building should be a minimum of 3m

from any/boundary fence adjoining residential development. Where they abut main roads they should conform with or be located behind the building line.

36.4.5 Parking

Where possible operational parking spaces should be provided for the company's service vehicles.

36.4.6 Landscaping

Adequate landscaping should be provided where necessary to screen the sites from public view. Roadways leading to sites should also be landscaped with a mixture of ornamental trees and flowering plants.

36.5 SITE PLANNING CONSIDERATIONS

The radio links must be free from obstruction, such as hills, buildings, trees or large moving objects. These factors along with the curvature of the earth and differing atmospheric conditions affect the siting and height of antennas. To cover long distances and to avoid these objects repeater stations, with one antenna to receive and another to relay the signal can be installed.

36.6 REQUIREMENTS

The installation of earth satellite stations, antennas, poles and cable duets is operational development for which planning permission is required. The maintenance of cable ducts is not regarded as development and no permission is required for this activity in an order area, but the installation of new ones is development and needs planning permission.

36.7 APPLICATION FORMS

Planning permission is required from the local planning authority where the application forms are available and to which they must be returned.

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CHAPTER 37

MOBILE BASE STATIONS/CELLULAR SITES

37.0 GUIDELINES

The coverage of a cellular system is provided by a network of radio base stations, each with a certain coverage area (cell). A base station is a facility that provides transmission and reception for radio systems. There are three (3) types of cells:-

- i Macro cells which provide the main structure for the base station network that has power outputs of tons of watts and communicate with phones up to about 35 km.
- ii Micro cells used to infill and improve the main network especially where the volume of calls is high. Their base station emits less power than macro cells and their range is a few hundred metres.
- iii Pico cell base stations which have a lower output than those of micro cells (a few watts) and are generally sited inside buildings.

37.1 OTHER AGENCIES TO BE CONSULTED

The systems are demand-led with the greatest need for base station sites being in built up areas, and within a mile or two of the main roads where demand on the network capacity is greatest.

Pre-application discussions on the location of a cell site should be had with the local planning authority and with other organizations that have an interest in the development such as residential groups, parish councils or amenity bodies before permission is sought as follows:

- i Where it is proposed to carry out development that would affect listed buildings and monuments, the Jamaica National Heritage Trust should be consulted. Other agencies such as National Works Agency where the development affects highways should be consulted as early consultation can identify possible conflict of interest and prevent costly delays.
- ii Where an application is being submitted to the local planning authority for planning permission for the installation, alteration or replacement of a base station either on, or near a school or

college, the proposal should first be discussed with the Ministry of Education.

37.2 LOCATION

Practicable heritage sites and sites of community concern such as schools, residences or where an antenna may interfere with emergency equipments should be avoided. Innovative design solutions to the provision of towers and/or antenna will be considered where the proposal may preserve or enhance the visual amenity.

Roof mounted antennas will be encouraged and shall be positioned and/or appropriately screened to minimize their visual impact by:

- i Incorporating them within or integrating them with the existing building and existing structures, or a new purpose designed roof feature.
- ii For flat roof buildings, placing facilities in the least visually obtrusive location that is practically feasible
- iii Where practicable, siting an antenna below the opening of a roof and away from street view.

Panel antennas on the face of a building will only be permitted where they do not significantly detract from the face of the building and should therefore be face mounted to the building and contained within the actual outline of a building as if they were part of the original building.

37.3 STANDARDS

37.3.1 Use Class

There is no special use class for a cell site in the Use Classes Order hence it is "sui generis" (unique).

37.3.2 Access

The type of access will depend to a large extent on the location and physical characteristics of the site. Where possible the site should be motorable with a grade of 1:7.

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37.3.3 Height

- i New moderate (8m 15m) to large scale towers (greater than 15m) for antennas will only be permitted where it can be demonstrated that there is no feasible alternative and/or the proposal is not significantly visually obtrusive.
- ii Where vertical multiple pole type antennas are used they should be about I - 3m in length and the small terrestrial micro wave antennas which may be required to be attached to provide links from the base station to the exchange should be 0.3m - 1.2m.
- iii No facility should exceed a height equal to the linear distance to the nearest existing building. This does not apply where it is on an existing building with the permission of the owner.

37.3.4 Setbacks

Ground stations should be adequately set back from residential areas, schools and other public institutions to alleviate concerns regarding health and safety. They should be a minimum of 76.2 metres from any existing residential structure.

37.3.5 Parking

An operational parking space should be provided on site where vehicular access is available.

37.3.6 Landscaping

Base stations should be suitably landscaped and screened so that they are not visible from roadways or create an impact on surrounding areas. This may involve an element of hard landscaping which should be undertaken by professional personnel and carried out with due regard for the environment.

37.4 SITE PLANNING CONSIDERATIONS

In areas where traffic density exceeds the limits of the network, capacity can be increased either by introducing new sites (macro or micro cells) or by splitting existing cells thus effectively doubling capacity. Cell splitting requires the erection of additional antennas at the base station or a new base station site.

The location of transmitter antennas is important as signals from one cell will

interfere with nearby cells on the same frequency. To avoid blind spots from buildings and hills, antennas must usually be placed high up. In urban areas they could be placed on buildings.

Associated equipment housing for antennas should be between 4 and 35 cubic metres in volume. Sites where a tower or antenna will be visually incongruous should be avoided where possible. Where there are several antenna mounting and location options, the option with the least visual impact on the community should be chosen.

Where feasible carriers should share existing antennas and towers, or modify the towers, but this should only be done if the cumulative impact is not significant and would be no worse than erecting individual towers and antennas. Where it is not possible to share a support structure, the sharing of a site or an adjacent site should be considered so that antennas may be clustered.

37.5 REQUIREMENTS

Mobile phone sites are not a permitted use hence permission is required for their development. Since the proposal involves radiated signals, the provisions should demonstrate to the local planning authority in writing that they meet international standards on radiation protection.

In cases where a mast is to be installed within 3 kilometres of the perimeter of an aerodrome, an application for planning permission should have written proof that the airport's authority or operator has been notified of the proposal.

37.6 APPLICATION FORMS

These are available from the KSAC/local planning authority to which they should be returned when they are completed.

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CHAPTER 38

CABLE / SATELLITE TELEVISION

38.0 GUIDELINES

Satellite and microwave dishes for pay T.V. shall be positioned and appropriately screened to ensure that the visual impact is minimized when viewed from the street.

Satellite and microwave dishes for commercial ventures should not be located in residential areas.

Facilities should not be positioned to appear unduly obtrusive on the skyline and must be of a size and design which is compatible with the surrounding scale and architecture of the locality.

38.1 FLAT ROOF BUILDINGS

Roof mounted antennas should be positioned and appropriately screened by placing the facilities in the least visually obtrusive location that is practicably feasible.

38.2 SHARED DISHES

Multi-tenanted developments and apartments should have a single shared dish to avoid a clutter of dishes impacting on the development. The facilities should be located to mitigate any adverse noise impact on residential amenity.

38.3 DIGITAL SATELLITE ANTENNAS

In considering applications for other forms of development such as housing schemes etc., due consideration will be given as to how the telecommunication needs of the occupiers will be met. Antennas for the reception of digital satellite broadcasting signals are generally much smaller and more discrete than those for analogue broadcasting and will be encouraged.

38.4 Use of Utility Poles

Only two companies will be allowed to run cable t.v. lines on the poles of utility companies at any one time. Cable companies will operate in areas designated by the authority.

38.5 STANDARDS

38.5.1 Use Class

Cable (TV) is not listed in the use classes order but under "permitted development"; domestic dishes not exceeding 70 cm in size will be allowed without permission depending on its location.

38.5.2 Access

Dishes should be sited where they are easily accessible by cable companies and individuals for maintenance purposes. This is important as their line of sight can be disturbed by high winds throwing the whole system into disarray and inconvenience to viewers.

38.5.3 Height

Dishes should not exceed 4.6m in overall height when installed at ground level and should not be higher than a residential building when located on it. Roof antennas in commercial areas because of their exposure should be screened.

38.5.4 Setbacks

No dish antenna should be located nearer than 1.5m to a side or rear residential property boundary. In front yards, they should be located within any building limits that may exist or no nearer than 6.0m to any road boundary.

38.5.5 Parking

Cable offices will need parking for customers and staff where the development is sited at one location. Parking should be in accordance with the requirement for offices as set out in the parking requirements. If the antennas are sited at ground level at a different location it will be necessary to provide parking for service vehicles.

38.5.6 Landscaping

Large trees will block the line of sight of the antenna and is not desirable. However, some form of shrubbery could be permitted around those mounted at ground level to soften the impact on the environment. Most of the commercial dishes are erected on the roofs of building and these could

be screened with planter boxes containing flowering shrubs (e.g. lantana).

38.6 SITE PLANNING CONSIDERATION

Antennas have to be in direct line-of-sight of the geo-stationary satellite and almost always have to be mounted outside of buildings. The location of the satellite dish on a building will therefore depend on the location of the satellite.

The construction of new buildings or other structures, such as wind turbines can interfere with broadcast and other telecommunication services and the possibility of such occurrence will be taken into consideration when dealing with applications. In selecting and siting dishes, the impact on neighbours, the public and the environment should be taken into consideration. The following factors should be considered in the siting and appearance of dishes:-

- i A mesh or transparent dish may be less obtrusive than a solid one.
- ii The location of a dish on a rear wall of a building or in the garden is usually less conspicuous than siting it on the front of the building.
- iii The performance of a dish is not affected by whether it is located higher up or lower down on a building as long as the line of sight with the satellite is not affected.
- iv The colour of the dish should blend with the background against which it will be installed.

Communal satellite T.V. systems agreements should be entered into:

- i Where planning permission is unlikely to be granted for several dishes on a single building.
- ii Where a communal system would be more environmentally friendly than a dish on each home. For safety purposes commercial dishes are best located on the roofs of premises and the guidelines in this regard should be adhered to.

38.7 REQUIREMENTS

Planning permission will be required for a dish installed on a dwelling house if it exceeds 70cm in diameter or if it exceeds the highest part of a roof on which it is to be installed. The measurement of the dish does not apply to mounting brackets, etc.

38.8 APPLICATION FORMS

This is available from the local planning authority upon request and should be returned to them with the necessary drawings illustrating the proposals.

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CHAPTER 39

TRANSMISSION STATIONS

39.0 GUIDELINES

Transmission stations play an important role in radio and television broadcasting and in cellular and land line telephone services. Under the Town and Country Planning Act where Development Orders exist these stations are regarded as "Development' for which planning permission is required.

- i The Planning Authority (PA) will assess all applications in accordance with the Development Order and other material considerations, such as views expressed by local people and a significance of the proposed development as part of a national network.
- ii Relatively minor development such as radio poles satellite dishes in respect of height and size do not require express permission.
- iii The exemption does not apply to equipment which is to be located in areas of scenic beauty, heritage sites, national buildings and conservation areas.
- iv Planning Authorities will be cognizant of the rights and obligations of the operations, as are stated in the Telecommunications Act and Licences issued by the controlling authorities.
- v The operator should provide the Planning Authority with a statement on each site indicating its location, the type of mast, the height of the antenna, the frequency and modulation characteristics and details of power output.
- vi The number of telecommunications masts and related apparatus existing across the island is at times aesthetically unpleasing and intrusive. The planning authorities will endeavour to rationalize the situation by encouraging mast sharing where concerns relating to security, power supply, radio interference can be satisfactorily dealt with.
- vii Where practicable the KSAC/local planning authority will:

- encourage the use of existing building as the site for new antennas rather than supporting new installations;
- require that the operators demonstrate that all reasonable steps have been taken to investigate using or replacing an existing mast or other structure before erecting a new mast.
- pursue the possibility of operators cooperating with each other to erect new masts for joint operation.

39.1 OTHER AGENCIES AND PUBLIC TO BE CONSULTED

39.1.1

All applications to be housed on sites with listed buildings, within heritage sites and conservation areas will be referred to the Jamaica National Heritage Trust and the National Environment and Planning Agency (Conservation Division) for comments/recommendations prior to determination.

Public participation will be encouraged in the planning stage of transmission sites.

39.1.2 Removal of unused Telecommunications Apparatus

The planning authorities shall ensure that apparatus no longer required for telecommunication purposes be removed as soon as reasonably practicable from the land or building on which it is located and the land restored to its previous condition.

39.2 STANDARDS

39.2.1 Use Class

Transmission stations are not included in either the use classes order or permitted development which means that an application has to be made to the local planning authority to establish them. Because of the health related sensitivity of the applications, developers should seek and obtain planning permission before undertaking construction.

39.2.2 Access

Base stations must be provided with proper access including driveways on property easements and the right of ways.

39.2.3 Height

The maximum height of towers/masts shall not exceed 45.72 metres within urban areas. This height could be increased in rural areas depending upon the circumstances of the situation, but should not exceed 53.34 metres from the adjoining grade. Sheds used for housing telecommunication equipment shall not exceed $13.9m^2$ in area nor exceed 2.4m in height.

39.2.4 Setbacks

The foundation of each mast/tower shall be a minimum distance of 6.1 metres from the physical barrier.

All applications proposed to be located within a 3km radius of airports, aerodromes, similar facilities and flight paths will be referred to the Civil Aviation Authority and/or Jamaica Defence Force for consultation prior to determination.

39.2.5 Parking

Operational parking spaces should be provided to accommodate at least two (2) vehicles.

39.2.6 Landscaping

Each site is to be provided with landscaping so that the visual effects of the development are not discernible from a public thoroughfare or detract from the amenities of the area.

39.3 SITE PLANNING CONSIDERATIONS

- i The site area of the base station shall be a minimum of 400 square metres. Operators shall consider the use of galvanized finish on antenna or materials, colours and design that would maximize obtrusiveness.
- ii Any change to an existing base station, which increases its size, or

the overall power radiated, should be subject to the normal planning process as if it were a new development.

- iii Satellite dishes and antennas shall be required to blend in with the background and shall be sited, as far as practicable to minimize their impact on the amenity and external appearance of the building.
- iv In urban areas the preference shall be for towers to be located on existing buildings rather than creating new installations/sites.
- v Exclusion zones at base stations should be determined and defined by an acceptable physical barrier and appropriate gating.
- vi The physical barrier at the base stations shall be a minimum of .5m in height of which 0.6m shall be rolling barbed wire or with outward projection to prevent intrusion.
- vii Readily identifiable signage, informing the public of potential danger of the site shall be posted at a conspicuous position 3m of any communication tower on all base stations shall be designed to prevent unauthorized access.
- viii The beam of greatest radio frequency intensity from a base station sited within or near the grounds of schools and nurseries, should not be permitted to fall on any part of the grounds or buildings of the institution, without agreement from the school administration and parents.
- ix The applicant shall demonstrate that the proposed transmission station will not adversely impact neighbourhood property values.
- x Cabinets and sheds housing equipment used in conjunction with a transmission station facility shall be subject to the following:-
 - Externally located cabinets shall not exceed an area of 1.52m in height by 1.52m in width by 1.52m in depth.
 - Sheds used for housing telecommunications equipment shall not exceed 13.9m² in area nor exceed 2.43m in height.

39.4 REQUIREMENTS

The KSAC/local planning authority will ensure that operators post a site notice to publicize the development of a transmission site so that local persons can express their opinion on the proposal.

The notice shall require the public's response within twenty-eight (28) days from the date of posting of such notice.

Operators will be informed by official notice that the processing time is 90 days. The KSAC/local planning authority will maintain an up-to-date list of all notifications, which shall be readily available for public consultation.

It is expected that RF fields to which the public will be exposed will be kept to the lowest practical level commensurate with the telecommunications systems operating effectively. Zones where exposure is of greatest intensity must be known especially in areas where apparatus are located on or near sensitive sites. Zones where obtrusion might occur must be known.

A precautionary approach is being taken to the possible exposure to radio frequency radiation, even at levels below international guidelines. The international safety guidelines for exposure of the public to the radio waves produced by cellular phones and base station antennas have therefore been adopted.

The operator shall comply with the guidelines established by the International Commission of Non-Ionizing Radiation Protection (ICNIRP) for public exposure to radiation.

International Commission of Non-Ionizing Radiation Protection (ICNIRP) reference level for public exposure at mobile telecommunications frequencies (ICNIRP, 1998).

Frequency (Hz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (W/m)	
400-2000	I.375 ½ ft	0.003 ½ ft.	F/200	
2000-3000	61	0.16	10	

Timely independent audits will be carried out by the relevant authority to ensure conformity to ICNIRP.

39.5 APPLICATION FORMS

Application for transmission stations is a full application for which application forms and detailed drawings of the site and the facilities should be submitted to

the KSAC/local planning authority for processing. Applications are "called in" statutorily and will be forwarded to the Town and Country Planning Authority by the KSAC/local planning authority for processing.

The required number of drawings and the scale to which they should be shown are listed under detailed applications.

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CHAPTER 40

ROADS

40.0 GUIDELINES FOR CLASSIFICATION OF ROADS

Roads provide vehicular and pedestrian access to individual lots and between towns and communities. They are divided into the following categories: (See Figs.24 & 25).

40.0.1 Main Roads (Highways)

These are designed to carry large volumes of traffic and heavy vehicles. They are limited access roads and skirt the towns rather than passing through them. They may be constructed as dual carriage ways with a reservation of 15.24m to 30.48m.

40.0.2 Main Roads (Primary)

These are roads which serve to carry through traffic between towns and are frequently travelled routes. The number of points of intersections with collection and other roads should be kept to a minimum. They usually have a reservation of 15.2 metres.

40.0.3 Main Housing Estate or Parochial Roads

Parochial roads link villages to each other and to main roads, and function as arterial roads. They are the main roads within residential subdivisions and accept traffic from collector roads. Normally they have a reservation of 15 metres and are used as bus routes or denser traffic routes.

40.0.4 Collectors or Housing Estate Roads

Collector roads provide for the movement of traffic between arterial roads and internal service streets. Their junction with arterial roads should be such that safe ingress to and egress from the subdivision is possible. They should be laid out in such a manner as to discourage their use by through traffic.

40.0.5 Service Roads

These are used for direct access to individual lots within a residential area and serve as connecting links to other roads in the subdivision. They should be used where it is necessary to avoid more than two entrances from the proposed developed area onto a main road.

40.0.6 Agricultural Feeder Roads

These roads provide access to agricultural areas and because they penetrate hilly country they have steep slopes and sharp bends. Generally the volume of vehicular traffic using these roads is low so they are not constructed at acceptable standards of gradients and sight distances. Because of the poor drainage they are susceptible to erosion and possible destruction during heavy rains. A road reservation of 8.5m is recommended for these roads.

40.1 STANDARDS

40.1.1 Road Design

Road design is dictated by the topography and the volume of traffic that is expected to use them. Roads provide the basic framework around which a neighbourhood is developed and have a major influence on the visual and functional character of an emerging community. The following major factors should be considered in designing roads:

- i Design for pedestrian or vehicular movement: Road and foot paths must lead people economically and safely in the direction they want to go.
- ii Efficient routes and falls for drainage and sewerage: In the interest of economy, the circulation network will often have to coincide with part or all of the drainage and sewerage network, and must perform this function efficiently.
- iii Orientation of Housing: Road alignments will often determine the direction in which houses will face, and this should be consistent with comfort, insulation, exploitation of breezes, views and economical construction in relation to contours.
- iv Clarity of Structure: It should not be too difficult to find one's way round a new settlement, and the roads should establish a clear and easily understood network.

- v Safety of Movement: The network must be safe for vehicles and pedestrians and must satisfy the detailed engineering requirements with respect to sight lines, junction design, construction standards etc., some of which are outlined in the section on "Roads".
- vi Economy of Infrastructure: The circulation network and the engineering services which usually parallel it, represent a major element in the construction budget of any project. In the interest of husbanding scarce national resources, roads should be designed with a careful eye on the economy.
- vii Environmental Impact: Roads, particularly in hilly areas, should be aligned with a sympathetic regard for the topography, preserving good trees and other natural features.
- viii A slight bending of a long road and variation of setback or "stagger" of houses is recommended to avoid long, straight and monotonous roads.(see Fig. 26).
- ix The width of a road should be the whole space dedicated to the public (between adjacent property boundaries) measured at right angles to the direction of the road. The width of the road should be indicated on the plan (or the distance from the centre line to the boundary).
- x Roads should be of sufficient width, suitably graded and located and adequately constructed to accommodate the type of traffic intended to use them, facilitate public transport, provide access for fire engines, and refuse collection vehicles. All lots or properties should have access from a road.
- xi All carriageways are to be protected by kerbs running parallel on each side where the design permits. This recommended kerb design should be one which allows for a continuous visual line broken by driveways only and giving access to each dwelling along the length of the roadway.
- xii The arrangement of roads in a subdivision may, if required, provide for the entrance and continuation of principal roads from adjoining subdivisions and for the extension of principal roads into adjoining land, which has not yet been subdivided. This arrangement may be required to facilitate the construction of utilities and public services, e.g., sewers, water, and drainage.

- xiii Intersection of streets should be approximately at right angles both for traffic safety and to avoid difficult lotting problems. Minimum visibility to and from accesses should be 91.4m in both directions along the main road. Where this is not practicable because of topography, speed limit in these areas should be reduced.
- xiv Tangents of 30.48m 61m. (depending on the nature and speed of travel on the street) are to be provided between "reverse curves" where the street comes first in one direction and then in the other.
- xv So ensure adequate site distances, minimum radii of 45.72m 121.92m may be required for horizontal curves and 30.48m-60.96m (100 200 ft) for vertical curves, depending on capacity of the road.

40.1.2 Landscaping

- i Avenues of trees and plants should be provided along highway medians and road corridors to reduce visual monotony and glare and enhance traffic safety.
- ii Landscaped earth mounds should be used to screen residential development from adjoining roadways where noise and pollution are a major concern.
- iii Trees in pits approximately Im by Im should be provided along sidewalks in new developments where re-alignment and reconstruction work have taken place.
- iv Lay-bys should be landscaped and be provided with shade trees where appropriate to facilitate weary travellers and allow picnicking.
- Long straight roads with repetitive units of houses lined up along a straight setback line give an impression of endless uniformity and monotony. Trees and other vegetation can be arranged to counterbalance this and also help to provide shade for pedestrians and to reduce the apparent width of roads.

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40.1.3 Drainage

Drainage ditches and culverts must be constructed to prevent storm water from damaging the roads.

40.2 LAYOUT OF ROAD SYSTEM

40.2.1 Grid Plan

- I This is the traditional road layout that developed before the introduction of the automobile. Although this form of layout is still appropriate in some of the older urban areas, care must be taken to determine if it is suitable for new developments where the scale and type of housing are different. Where the topography of the site does not permit economic development in this manner, the traffic pattern must be designed to reduce potential hazards to the minimum.
- II Where a grid or modified grid plan (see Fig.28) is considered to be appropriate, the following factors should be taken into consideration:
 - as few houses as possible should face the shorter linking roads normally about 61m in length (Figure 14);
 - continuous road frontage should not exceed 365.76m. This distance can be increased to a maximum of 487.68m, if a public pedestrian access way with a minimum width of 3m is provided near the mid point giving direct access to an adjacent road (Figure 14).

40.2.2 Other Road Plans

Road systems may utilize other forms of layout including cul-de-sacs, loop roads and P-loops (figs.14 & 27). In the use of these service road forms the following factors should be considered:

i when a cul-de-sac is used in residential development, it should be provided with a paved turning circle of sufficient width to facilitate easy access, and the turning of not only cars but trucks and other heavy vehicles like motor fire-engine, etc. The recommended minimum radius is 10m.

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- ii the maximum length of a cul-de-sac should be 106.68m. to the turning circle. This distance may, however be provided from the turning circle of a cul-de-sac giving direct access to an adjacent road. Cul-de-sacs should not be located as direct extensions of estate roads (Figs. 14 & 27).
- iii P-loops which are defined as loop roads from a single access point, should have an entrance leg not exceeding 213.36m and should have an emergency vehicular access way with a minimum width of 3m from the loop giving direct access to an adjacent road. The loop should have a road length not exceeding 427m. (Fig. 14).

40.2.3 Road Gradients

Road gradients are normally dictated by the topography of the land. Steep gradients should be reduced to a minimum and should not be at road intersections. The following guidelines should be followed when laying out new roads:

Maximum slopes	:	5% for a distance of 30.48m from a road junction
Maximum slopes	:	10% for distances in excess of 60.96m. 15% for distances
		not exceeding 60.96m
Cross slope	:	For paved roads 1:100.
		For unpaved roads 1:50.

40.2.4 Road Intersections (see Fig. 29).

The following guidelines should be followed where it is practical to do so.

- i All road intersections should be designed to reduce traffic conflict. Hence intersections with more than four approaches should be avoided where possible to reduce the number of collision points.
- ii Intersections on the inside curves of through roads should be avoided if possible as acceptable sight distances are difficult to obtain with such intersection.
- iii Y intersections should be avoided as they can be misleading unless one route is given obvious precedence over that adjoining it.
- iv Junctions of any kind should be avoided at the brow of a hill or where the driver's vision is obstructed by the natural topography or buildings.

- v T junctions at right angles to the road are preferred intersections because vehicles entering through roads are forced to stop or slow down thus reducing the likelihood of collisions.(see Fig. 28).
- vi Roads forming an intersection should meet one another at 90 degrees plus or minus a tolerant of 10 degrees. This alignment should be maintained for a distance of 30.48m measured from the centre point of the intersection.
- vii Every effort should be made to avoid crossover intersections of access roads or secondary roads with main roads. Such intersections should be staggered and a minimum distance of 60.96m maintained between junctions unless warranted by exceptional circumstances.
- viii Corners at intersections should be rounded with a radius of 6m 7.6m so as to facilitate turning movements.

40.2.5 Visibility Splays

Visibility splays are the angles of visibility which are designed at all major road intersections. They are intended to facilitate the unobstructed vision of motorists from one street on to the other, thereby minimizing the risks of accidents. Suggested visibility splays in relation to street type are listed below:

Road Type	Total Width	Carriage Way	SIDEWALK RESERVATION			Visibility Splay	Splay Distance
	(m)	(m)	Total (one side)	Paved	Planted (m)	Angle (Degrees)	(m)
Service Road	9	6	1.5	-	-	45	1.8
Estate Road	12	6	33	1.2	1.8	45	3.0
Main Estate Road (spine or collector)	15	8.5	3.25	1.45	1.8	30	3.0
Main arterial road (adjacent residential areas)	21	I 4.6 dual	3.25	1.45	1.8	30	4.6

ROAD VISIBILITY SPLAYS AND SIDEWALK RESERVATIONS

40.3 SHOULDERS

Shoulders are required to support the paved surface of the road and to provide areas for safe emergency stopping of vehicles. They should never be used as permanent parking places for vehicles.

The construction of shoulders should be done as carefully as the construction of the main paved area of the road except that shoulders on access roads would not normally be paved.

Unpaved shoulders should be properly grassed and maintained, otherwise, storm water may enter the road base and affect the stability of the road.

40.4 BUS LAY-BYS

Where there are bus routes roads are to be designed with areas off the main carriageway for buses to pick up and let off passengers. Such bus lay-bys must be properly sited so as not to impede the sight lines of traffic and to allow the buses to enter and leave the lay-by safely. The Ministry responsible for transportation will determine the optimum location for bus lay-bys, after a study is made of the traffic and passenger flows, the width of the roads, gradients and horizontal alignment.

The design of the lay-by itself should take into account the size and characteristics of the vehicles using it, and in general should be at least twice as long as the longest vehicle, and the width a minimum of 3.0m.

40.5 PEDESTRIAN ACCESS-WAYS

The major types of pedestrian access ways are:

- i footpaths
- ii sidewalks
- iii walkways

40.5.1 Footpaths

Footpaths are pedestrian access ways designed to accommodate heavy volumes of pedestrian traffic and to allow pedestrians to walk from one area to an adjoining area without interference by vehicular traffic. They do not necessarily run parallel to or alongside a road as is the case with sidewalks.

Footpaths in urban areas are usually paved, but they must:

- be connected to a public thoroughfare
- be limited in length to allow for normal servicing (fire, health, utilities) of the lots on either side of the footpath
- allow easy garbage collection;
- be so designed as to allow future upgrading. The width of the right of way through the footpath runs must be such that a standard paved vehicular road can be constructed at a later date.

40.5.2 Sidewalks

Sidewalks are part of the road right of way (reservation) used for pedestrian movement. They are necessary in town centres to separate pedestrian traffic from vehicular traffic.

- i Sidewalks vary in width depending on the road capacity and varies from 1.5m to 3.4m;
- ii They should wherever possible be complemented with planted verges and be landscaped with flowering and ornamental shrubs.
- iii Sidewalks should be barbed along the road ward side to support the edge of the road.
- iv The recommended widths of sidewalks in relation to road widths is given under road visibility splays.
- v Provisions should be made for access by handicapped persons (see section on provisions for the handicapped).

40.5.3 Walkways

i Walkways should be provided from all required entrances and exits of residential buildings to parking areas and adjacent public roads.

- ii The alignment and gradient of walkways should be coordinated with the ground level plan to prevent the passage of large flows of surface water on or across the walkways.
- iii Width of Walkways

The minimum width of walkways shall conform to the following:

- Main walkways for apartment buildings more than 3 storeys high and walkways serving more than one building shall have a minimum width of 1.5m;
- Main walkways for apartment buildings not more than 3 storeys high and secondary walkways for apartments more than 3 storeys high shall have a minimum of 1.2m.
- Secondary walkways for apartment buildings not more than
 3 storeys high shall have a minimum width of 0.9m.
- Main walkways to a house entrance shall have a minimum width of 0.6m – 1.8m.

iv Gradient of Walkways

- The maximum gradients for walkways shall be 1 in 20 except in difficult terrain where steeper slopes will be permitted
- Maximum cross slope for walkways shall be 1 in 20
- Where the gradient is less than 1 in 20, the minimum cross slope shall be not less than 1 in 40
- Where steps are required in a walkway there shall not be less than two risers in a flight. The steps shall be as wide as the walkways and shall be provided with a hard rail on all open sides when there is more than three risers in a flight. Provisions should be made for the handicapped as outlined in the section on provisions for the handicapped.

40.6 DRIVEWAYS

i The alignment of driveways should be coordinated with the ground level plan to prevent the passage of large flows of water on or

across the driveways. Driveways from lots should be at least 6.0m from road intersections, where possible. Normally, the minimum width of one-way driveway serving one to four dwelling units shall be 2.43m. If the driveway is also to serve as a walkway the combined width shall not be less than 3.0m clear of all projections.

- ii The minimum width of a two-way driveway to serve over four dwelling units shall be 5.48m. If a walkway is to be combined with a driveway, it shall be additional to the minimum driveway width and should be clearly demarcated.
- iii Maximum cross slope for driveways shall be 1 in 40. Where the gradient is less than 1 in 60 minimum cross slope shall be not less than 1 in 40.
- iv Turnabouts should be provided where possible on individual lots where these lots face on collector (estate) roads. Kerb radius where driveways intersect with the street should be a minimum of 1.5m radius.

CHAPTER 41

SUBDIVISION OF LAND APPLICATIONS

41.0 BACKGROUND

The subdivision of land is a permanent change which when built on, determines its use for a long time and profoundly affects the surrounding area. The public is therefore concerned as to how land is subdivided and to protect their rights. There are laws governing the subdivision of land, with government playing an important role in the process. This has led to established standards of design and regulations to which a sub divider must conform if his proposal is to be approved. To enhance the process and ensure quick response by the authorities, subdivision applications have been divided into two categories:

41.0.1 10 lots and over

- i Where the application for a subdivision is in excess of 10 lots, it is normally dealt with at a meeting of the Subdivisions Committee. This committee consists of members of government agencies that would normally be consulted for advice and comments on applications. The objective of the committee is to have the various agencies' input into an application at its meeting so that it can be dealt with expeditiously.
- ii The advisory agency therefore inspects and comment on an application before it is placed on the Committee's agenda to be dealt with. The decision on an application on the agenda may be deferred if any agency needs to carry out further investigation / studies, or if more information is required of the applicant.
- iii The decision of the Committee is then transmitted as a recommendation to the KSAC/local planning authority to make a decision on the application.

41.0.2 Under 10 lots

i Where the subdivision consists of less than 10 lots the National Environment and Planning Agency (NEPA) replies directly to the KSAC/local planning authority without any reference to the Subdivisions Committee. This is after the comments of the statutory authorities have been received so that they can be

included in the recommendation.

ii The decision of the local authority is sent along with the application and recommendations from the Subdivisions Committee or NEPA to the Minister who is responsible for administering the Local Improvements Act. The Minister makes the final decision on an application and the local authority conveys this to the applicant.

41.1 CIRCULATION OF APPLICATION

The application to subdivide land irrespective of the size is submitted to the Secretary Manager of the Parish Council, Portmore Municipality or the Town Clerk at the Kingston and St. Andrew Corporation (KSAC) on a form provided for the purpose.

The Parish Council, Portmore Municipality, KSAC, checks the application for accuracy and circulates it internally to its Superintendent of Roads and Works and Fire Department.

Usually the Superintendent of Roads and Works is concerned about water supply to the scheme, the engineering aspects of roads and drainage systems and the fire department with the location and size of fire hydrants.

While the plans are with the Fire Department and the Superintendent of Roads and Works, the Planning Department carries out a physical inspection and assessment of the site in terms of its location, physical characteristics and size of lots. On completion of the inspection and assessment of the plans they are sent to NEPA with the internal comments/report.

When an application is received by NEPA it is registered and sent to its officers for inspection and processing. During this period it is circulated to a number of agencies, depending on the size and nature for their comments. It is a statutory obligation that the National Works Agency (NWA) and the Government Town Planner comment on the application.

When the comments are received from the various agencies to which they were circulated they are placed on the related files.

Under 10 lots are sent to the processing officer to be dealt with directly while those 10 lots and over are sent to the Subdivisions Committee after which they are dispatched to the Parish Council.

When the comments are received from NEPA they are vetted by the Parish Council or KSAC and a list of conditions of approval is compiled and sent to the

applicant for acceptance. Once accepted the application is then taken to the Council meeting. Applications are also taken to the Council meeting if NEPA recommends them for refusal and the Council is in agreement with the recommendations. Sometimes applicants are asked to make modification to plans before they are taken to the council meeting. This is due to the fact that once a decision is taken on a subdivision application by the Council it cannot be taken back to a meeting before three (3) months have elapsed.

The decision of the Council is then sent to the Minister in charge of the planning for ratification.

Once approval of the Minister has been received the Manager/Secretary signs the plans and sends them to the applicant. Upon completion of the subdivision if the Superintendent of Roads and Works is satisfied a completion certificate is issued. This is necessary for obtaining titles for property.

41.2 LEGISLATION AND INSTITUTIONAL FRAMEWORK

The subdivision of land can be dealt with under the Town and Country Planning Act where adequate provisions have been made in the Development Order to do so. None of the Development Orders except for the St. Ann Parish Order is equipped for this purpose hence applications are processed under the Local Improvements Act. (See Legal and Institutional Framework for Planning and Development for details).

41.2.1 **Provisions of the Local Improvements Act (LIA)**

- i The L.I.A. of 1914 governs the subdivision of land throughout Jamaica and has been modified to keep abreast of changing situations.
- ii It identifies the Parish Councils in the rural parishes and the Council of the Kingston and St. Andrew Corporation as the bodies responsible for the subdivision of land. (Section 4)
- iii It stipulates that a plan of subdivision must be deposited with the Council before a subdivision is laid out. (Section 5)
- iv It states the requirements for depositing a subdivision plan. Plans should be drawn to a scale designated by the Council and should show all streets and lots with numbers and be signed by a Commissioned Land Surveyor. A specification showing how the street works are to be constructed should also accompany the

applications. (Section 5)

- It defines "subdivision" as the laying out or subdivision of land for the purposes of building thereon or of sale, if one sells or offers for sale any part of such land whereon a house or other building may be erected, or if one shall form the foundation of a house or other building thereon in such manner or such position so that such house or other building will or may become one of two or more houses or other buildings erected on such land (Section 5 –4)
- vi It defines sale as including gift, exchanging or other disposition affecting the fee simple, and lease for any term or any letting or any licence whereby the land may be used for building purposes and also includes any disposition affecting the leasehold interest under any such lease as aforesaid.
- vii It gives the Council power to exclude areas from the operation of the act, but the resolution doing so has to be approved by the Minister in charge of planning and be published in the Jamaica Gazette.(Section 7).
- viii It gives the Councils power to refuse or approve subdivision with or without conditions. (Section 8).
- ix In the case of refusal the Council shall state reasons for doing so and where conditions are prescribed state reasons for prescribing such conditions or making alterations to maps. (Section 8 2).
- x Where the Council sanctions a subdivision it has to be sent to the Minister for confirmation. The Minister may confirm or disallow the decision of the Council or modify it as he may think fit. (Section 8-5).
- xi Unless the Minister proposes to confirm a decision of the Council without imposing conditions then he shall give the Council and the person to be affected by the decision an opportunity of being heard. (Section 8 6).
- xii The decision of the Minister is binding on the Council and is not subject to an appeal.. (Section 8 10).
- xiii The decision of the Council is subject to an appeal to the Minister (Section 15 1).

- xiv Appeals must be lodged within 21 days of the decision appealed against and should comply with the Local Improvements (Appeals) Rules 1959.
- xv The Council may carry out works required in the approval of a subdivision if the subdivider fails to do so and recover the cost from the owner as a debt due to the Council and held as a charge against the land (Section 10).
- xvi The law stipulates a penalty for:
 - subdividing and selling land without first obtaining approval of the Council;
 - aiding a person to assisting in or laying out or subdividing any land before plans are approved by the Council;
 - laying out or assisting in laying out or subdividing land otherwise than in accordance with approved plans;
 - failure to perform the street works within the time prescribed by the Council;
 - failure to comply with the conditions of approval;
 - committing a breach of any regulation under the Act. (Section 12)
- xvii All Councils must, by law, submit subdivision plans and support documents to the Chief Executive Officer (CEO) of the National Water Commission and the Government Town Planner for their advice and assistance.
- xviii Where the Council proposes to reject the advice of any of the agencies the Council shall afford them an opportunity of being heard. (Section 14 2).

41.3 LOCAL PLANNING AUTHORITY / PARISH COUNCIL

Unlike local planning authorities that are appointed by the Minister, or which status local authorities enjoy by virtue of Section 2 of the Town and Country Planning

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Act, the local authority is a body elected by the people of Jamaica.

The local authority, which is the Kingston and St. Andrew Corporation in the corporate area and the Parish Councils in other parishes, carry out everyday parish council activities, e.g., maintenance of markets, roads, etc. Planning is an additional function mandated under the Town and Country Planning Act for areas covered by Development Orders in their jurisdiction. (For details on Local Planning Authority please see "Institutional Framework, Chapter 3 of this document).

41.4 SUBDIVISION GUIDELINES

- i Land which has productive agricultural potential is not to be subdivided for housing development or in anyway urbanized so as to render it unfit for agricultural use.
- ii Agricultural lands are classified as:
 - Intensive use which land is to be retained for intensive cropping;
 - Extensive use which is to be retained for grazing, tree crops and the less intensive use.
 - They are also defined by soil classes and crop sustainability.
- iii Under no circumstances will intensive use land (Classes I III) be permitted to be subdivided for other than agricultural purposes and only under extreme circumstances will buildings be allowed on these lands.
- iv Extensive use land (classes iv v) where it adjoins intensive use may be used for buildings related to farming the land. Lands not falling into any of Classes II - III category may be subdivided for building purposes.
- v For sites of over one hundred housing lots, the scheme should cater to more than one type of development or one price range in the housing market.
- vi Lot sizes for housing development should fall within the guidelines provided in the section on General Considerations for planning/development.

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- vii The depth of a housing lot should be a minimum of 2.5 times the width of the same lot.
- viii Major streets should not traverse residential subdivisions but should instead be located on the periphery where they can provide good access to the internal road system (see Fig. 25).
- ix Fire protection measures such as the location of hydrants, cul-desacs turn around, etc., should be taken into consideration in designing the street system.
- x The widths of interior streets in a residential subdivision should be consistent with their functions, should not be greater than necessary in the interest of safety and economy of installation and should conform with the guidelines under Roads.
- xi The width of road reservations and required pavement is set out in the section on "Roads".
- xii The use of "T" intersections on minor streets and minor street with collector streets improve traffic safety within a subdivision and should be used wherever possible (see fig.29).
- xiii T intersections that are on opposite sides of the mainstreet and are offset by less than 38m, will not be accepted. A minimum offset of 38m-46m (125 – 150 ft). between centrelines of parallel streets is required, see figure 29.
- xiv The layout of lots in a subdivision can make it attractive and safe or unattractive and dangerous. Only good lotting practices will be accepted by the local authority, see Figures 30-31..
- xv Hilly lands with grades in excess of 10 per cent may be subdivided for low density housing but lower cost housing with small lots should be located on flat or gently sloping land.
- xvi Roads should be laid out so as to avoid steep grades, excessive cut and fill, and to provide buildable and vehicular accessible sites.
- xvii On steep slopes roads should follow natural drainage lines, ridge locations or cut across contour lines to reduce steep grades.
- xviii If warranted by the population to be served, local convenience shopping facility should be located in the subdivision at an arterial

traffic junction, or adjacent to similar commercial facilities where they exist.

- xix Sites for school and other institutional facilities should be located about a central point and be combined with the recreational area to be provided.
- xx All subdivisions are to be connected to an existing public road and connections are to be as required by the appropriate road authorities.
- xxi The local authority may refuse to approve any subdivision if:-
 - in their opinion closer subdivision or settlement of the land shown on the scheme plan is not in the public interest or the land for any other reason whatsoever is not suitable for subdivision;
 - in their opinion adequate provision has not been made for the drainage of any allotment or the disposal of sewage there from;
 - in their opinion the subdivision would interfere with or render more difficult or costly the carrying out of any public work or scheme of development which is proposed or contemplated by the government or any local authority;
 - in their opinion the proposed subdivision does not conform to recognized principles of Town Planning;
 - there is inadequate information given concerning the proposed coordination with adjacent land and its development and services.

41.5 STANDARDS

41.5.1 Use

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The type of subdivision will depend to a large extent on the land use zoning or the use to which the land is to be put. Lands can be subdivided to create a residential community involving all types of land use necessary for it to function properly such as retail shopping, restaurant, etc. or for commercial, office or industrial

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purposes only. In some cases lands may also be subdivided for agricultural and forestry use depending on their location, and the need to satisfy public demand for agricultural plots for farming.

- ii For agricultural purposes, land is classified into the following categories related to agricultural use.
 - Class I

Land which is level with deep fertile soil and no factors limiting its use for agriculture.

Class II

Land which is suitable for cultivation with moderate limitations such as slope, inter fill soils or poor drainage.

Class III

Land suitable for cultivation with strong limitations by one or more of the following factors:

steepness or slope infertile soil poor drainage

Class IV

Land that is of marginal use for cultivation due to one or more of the factors listed above.

Class V

Land that is not suitable for cultivation due to adverse soil factors. Usually steep land that should be used for forestry or fruit trees.

Class VI

Land not suitable for any form of cultivation, but suitable for watersheds. It should not be cleared of its natural vegetation.

iii The land classification system is of a general nature and in some

instances may not be specific enough for detailed planning. Note should also be made of the fact that a classification could be improved by removing one or more limiting factor(s).

Care should, therefore, be taken in the interpretation of agricultural land use and when in doubt, reference should be made to the Ministry of Agriculture.

41.5.2 Access

- i Access to subdivisions should be from an arterial street with the design being such that it will minimize the creation of traffic hazard, prevent pedestrian conflict and be safe for both pedestrian and motor vehicles.
- ii Where it is a large subdivision involving the movement of a large number of vehicles there should be accelerating and decelerating lanes on the main roads at the access to prevent obstruction of through traffic.
- iii Vehicular access will not be allowed from any lots directly on to a main road. In cases where this might occur a service road should be constructed running parallel to the main road from which individual access is to be taken. The area between both roads is to be landscaped with one entry point only on to the main road from the subdivision as shown in Figures 15 & 25.
- iv Streets should be extended to the adjoining property boundaries of undeveloped lands to allow for rationalization of the road network and to provide access for the extension of amenities and utilities.
- v In commercial and industrial subdivisions because of the traffic they will have to carry, streets should be constructed to higher than usual specifications.
- vi Commercial and industrial streets should be utilitarian and therefore should not impede through traffic. Instead they should be designed to expedite the free movement of traffic to specific locations.
- vii Shopping centres and other commercial activities may be required to have service roads paralleling existing streets. Sidewalks should

be provided in commercial areas and in industrial areas where the necessity arises.

viii In industrial areas streets should be designed to accommodate the movement of large and cumbersome trucks. Dead-end streets should therefore be overridden and corners well rounded. Streets in these developments should not connect directly with streets in residential areas.

41.5.3 Setbacks

- i The boundaries of subdivisions should be adjusted to make provision for any road widening or improvement that may be contemplated by the road authorities. Such reservations are to be kept free of building or other permanent structure until required by the authorities.
- ii Subdivisions along the coast should be cognizant of government policies for coastal development and conform to them, especially those relating to setbacks from high-water mark. Where mangroves exist they should be left as conservation areas or covenants placed on them to prevent destruction.(see Fig. 21).
- iii Where lands are being subdivided along the banks of rivers and streams, property boundaries/lot boundaries should be set back so that they protect mangroves and other environmentally sensitive areas.
- iv Commercial and industrial buildings should be set back from residential areas with landscaped planting strips acting as a buffer between both developments.

41.5.4 Lot Size

- i In order to prevent the fragmentation of good agricultural land (land capability classes i to iii) under normal circumstances lot sizes should be a minimum of 2 hectares for crops and grazing animals on soils of high capability with the lot sizes increasing considerably on soils of lower capability (class iv and above).
- ii Where an agricultural subdivision is in excess of fifty lots, an area of land (excluding classes i-iii or that deemed to be more marginal in the case where only classes i-iii exist should be set aside for

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residential lots for those who do not wish to live on the farm. These lots should not be larger than $557m^2$ and the area should be provided with the necessary amenities and utilities required in a normal residential subdivision.

iii To ensure economic viability the following minimum size agricultural parcel is recommended for each agricultural enterprise listed below:

ENTERPRISE Livestock – Dairy cattle	LOT AREA 8 ha
Extensive agriculture : tree crops, coconuts, cocoa, coffee, Livestock – sheep, goat	4 ha
Mixed agriculture – Large farms Food crops (mixed) Sugar cane Citrus	2 ha
Mixed agriculture – small farms Pig farming Vegetables / food crop (mixed)	I.2 ha
Intensive agriculture Vegetable farming (mixed)	0.4 ha

- iv In farming communities where large blocks of land in excess of 10 hectares exist, owners will be allowed to cut off a portion equivalent to 0.4 hectare for a homestead, with no further subdivision of this lot or the remainder of the lot from which the homestead was cut.
- v In residential subdivisions use should be made of long shallow blocks that will allow narrower frontage and deeper lots thereby decreasing development costs.
- vi Double frontage lots are undesirable (that is lots with road to the front and rear) and will be discouraged irrespective of their size.
- vii Reverse frontage lots, i.e., corner lots where houses face the side street rather than the street faced by their neighbours, will not be allowed as their backyard will be in the neighbours front yard and

this is not satisfactory.

- viii The arrangement of lots should be sensitive to topography, microclimate, road patterns and the building types being proposed.
- ix On sloping lands, lots should be laid out so as to minimize the destruction of the physical environment due to extensive cutting, filling and grading. Lots on steep slopes should be larger since portions of the site may be unusable as a result of topography.
- x Lots must be capable of being used for the purpose for which they were designed.
- xi Where the creation of irregular shaped lots are unavoidable, such lots should be larger than the regular ones, since their shape may render a portion of the site unusable for building.
- In corner lots no fence, hedge, wall or other structure more than
 I metre in height should be erected or placed within the splay, i.e.,
 the triangular area formed by the intersection of major roads or
 minor roads at a specified distance required along these roads.
- xiii Buildings for housing livestock should maintain a distance of 30m from any dwelling house or 15m from a road reserve.

41.5.5 Landscaping

The layout of roads should safeguard natural landscape features and wildlife habitats. Significant natural site features should not be destroyed but incorporated as an integral part of the subdivision. Landscaping can also act as a buffer between uses in large subdivisions.

41.5.6 Drainage

Natural water courses are relied on as an essential part of the storm water drainage system in subdivisions. Where these exist they should be provided with easements so that they will be easily accessible to the authorities that will have to keep them clear and otherwise maintain them. In industrial and commercial subdivisions larger than normal storm drains should be provided as there will be excessive runoffs due to the intensive areas covered by roofs and pavements.

41.6 SITE PLANNING CONSIDERATIONS

Developers should give careful attention to the quality of the overall design, including house type, community facilities, parks, landscaping and street furniture:

- i Each block shall normally be designed to provide two rows of houses, one on each side of a road, exception has to be made according to terrain and configuration of the land. On fairly steep but stable land, for example, houses may be arranged in single rows only, as it may be impossible to provide access to lots on both sides of the road.
- ii Lots should be laid out and arranged in such a way as to avoid any foreseeable difficulties by reasons of unusual topography or other natural conditions and to permit construction of buildings and access in full compliance with building regulations where these are in operation.
- iii Lots should not be of unreasonable depth thus encouraging the later creation of a second building lot or backlands development at the rear. If such depth of a block is unavoidable, provision should be made in the layout of the subdivision with access through driveways to the lots that do not face the road.
- iv If lots must face onto major traffic arteries, a planting screen easement should be provided, allowing no right of vehicular access to the lot, i.e., a green buffer strip should be placed between the row of lots and the major roads. In such cases vehicular access should be from a service road or parallel road at the rear.
- v Wherever possible, lots should be laid out so that driveways have access to roads intended to carry the least traffic.
- vi For corner lots, special standards are to be followed in construction and planning to provide an unobtrusive view over the corners for traffic safety. Normally, they should be splayed and benched where necessary, particularly when they face major traffic arteries.
- vii All sidelines of lots should preferably be at right angles to the straight road lines and radial to the curved road lines. Variations for the purpose of orientation etc., may be allowed as in Figure 26.

- viii No vehicular exit from any building providing off street parking for 10 or more cars shall be closer than 15.2m from any intersection and for exits from buildings housing 50 or more cars the distance shall be no closer than 6m where possible (inclusive of parking garages).
- ix Where these developments are on a major road, these standards may be varied depending on the nature and type of intersection under consideration and subject to the requirements of the Chief Technical Director, National Works Agency.
- x No topsoil should be permanently removed from any land to be subdivided and/or developed. Topsoil so removed should be stockpiled in a satisfactory manner. When final grades have been established and construction activities have been completed the entire property shall be suitably graded and re-covered with any topsoil removed.
- xi Topsoil should be seeded and maintained to ensure that a good vegetative cover can be established to protect the site against erosion.
- xii To improve the visual quality of streets, parking areas for apartment blocks and other buildings should be located where convenient, out of sight (e.g., screened by effective landscaping); on the other hand, open spaces etc., if appropriate, should be visible without imposing on the privacy of the occupants. The use of opaque fences which shut out the view of buildings and amenity areas is to be avoided, but were screening is necessary the use of landscaping is recommended.
- xiii Motor vehicles from row or townhouses should, where convenient, discharge into its own access-way and not directly onto main roads.
- xiv Subdivisions may be designed to accommodate not only detached houses but also mixed housing types including apartments and town houses on larger parcels of land depending on the circumstances and density requirements.
- xv Measures to safeguard against the effects of soil erosion are to be incorporated in the design of subdivisions and subsequent use of the land. Specific measures, which may be employed, include use of

barriers such as terraces, verges, and vegetation.

xvi Short dimensions of a lot should always be oriented to the street as this decreases the cost of servicing the lots since both road and infrastructure cost is reduced.

41.6.2 Temporary Limitations

Temporary limitations such as the unavailability of water for irrigation will not be accepted as a reason for removing land from agricultural use.

41.6.3 Phasing

In layer subdivisions consideration should be given to phasing the development. Overall design, layout, use and utility requirements must, however, be determined prior to beginning the development.

41.6.4 Seeding

Seeding of subdivisions with houses is normally required where the objective is selling land and not the immediate development of houses, a1:3 ratio is the normal requirement.

41.7 DOCUMENTS REQUIRED

An application to subdivide land shall be accompanied by the following documents:

41.7.1 Layout Plans

The Applicant will be expected to present plans in a good state of preservation with all lines and writing legible. The plans shall indicate:

- i area of land showing boundaries of lots inclusive of roads and open space
- ii dimension of lots
- iii field notes in respect of outer boundaries (requisition of K.S.A.C)
- iv name of roads (required by K.S.A.C)
- v longitudinal and cross sections (new roads) showing grades

- vi lot numbers in sequence and their areas
- vii proposed phasing if any
- viii use of each lot
- ix location, type and use of existing buildings
- x contour lines at 0.6m 3.0m intervals, depending on the topography (over 15% grades) in respect of subdivision in excess of 10 lots
- xi meridian to which the survey is referred
- xii scale to which the survey is referred
- xiii scale to which the plan is to be drawn are: –

•	l:2,500, l" to	200 ft.	=	I:2000m
•	l:1,250,1" to	100 ft.	=	l:1000m
•	l:500, l" to	50 ft.	=	l:500m
•	l:250, l" to	20 ft.	=	I:200m

The choice of scale is dependent upon the area of land to be subdivided.

41.7.2 Other Requirements

- i Existing and proposed surface water drainage details including culverts and drains.
- ii Details of river or gully training works where appropriate
- iii The width of all existing and proposed roads and access ways
- iv Outstanding natural and cultural features
- v Name, signature, occupation and address of owner/agent
- vi The nearest place/object of significance to and from which any road leads (e.g. milepost, post office, church, bridge, etc.) to which the subdivision relates

- vii Such information as suffices to identify any particular road
- viii Letters or numbers of main or parochial roads, where possible
- ix Adjoining land ownerships where possible, showing cellular towers, waste facilities etc.

41.7.3 Reports Required

The plans shall be accompanied by:

- i A site investigation report and a soil percolation test report (where the subdivision is in excess of 20 lots) and is for non agricultural purposes.
- ii Estimates to cover cost of road construction, laying of water mains, drainage etc.

41.7.4 Ad Hoc Developments

Where small portions of a large area of land are being cut off, the developer should indicate where possible the use to which the remaining portion of the land will be put. This is intended to give the planning agency better control over ad hoc developments.

41.7.5 Location Diagram

i

- This is an essential part of the application as it facilitates:
 - plotting on a map and the identification of the physical location
 - the officer processing the application to locate the site easily and so avoid delays
- ii The diagram shall show:
 - urban areas on plan metric sheets at a scale of 1:1,250 or 1:2,500 or 1:5,000
 - rural areas at a scale of 1:12,500 (where maps at this scale are not available 1:50,000 may be used)
 - where possible, definable and easily recognizable land marks,

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together with necessary data e.g. distance from nearest mile post, road intersection, bridge, church etc. The site coordinates may also be provided.

41.7.6 Number of copies of plans required:

The number of copies of the plans to be submitted depends to a large extent on the size of the proposed subdivision:

٠	9 lots and under	– 15 copies

10 lots and over – 18 copies

41.7.6 Application Form

- i Six copies of the application form is to be completed in triplicate and submitted to the local authorities (KSAC and Parish Council) together with the required drawings. A sample form is shown in the Appendix with more detailed requirements.
- ii A completed Project Information Form (PIF) must be submitted to NEPA for all applications 10 lots and over.
- iii The following information is also required:
 - the owner of the land
 - the size
 - present and proposed use
 - subdivision whether agricultural, residential etc.

41.7.6 Points to Note

- i Special attention should be paid to the questions asked and comprehensive answers are to be given where applicable.
- ii To avoid delay in the processing of an application additional information to clarify the proposals should be stated on plain paper and attached.
- iii These are the documents and information normally required but the Subdivisions Committee and the Local Authority may ask for additional information relating to subdivision proposals.

41.8 FLOW CHART

The flow chart for subdivision application is attached at the Appendix 3.

41.9 FEE STRUCTURE

While there is no fee payable for the processing of development applications under the Town and Country Planning Act, under the Local Improvement Act there is a fee chargeable for subdivision applications. Although there may be slight variation in the amounts depending on the local authority the assessment is based on the same principle.

A fee is collected which is relative to the market value of the land as per National Land Agency Valuation Certificate that has to be presented with the application. There is also a fee that is one per cent (1%) of the estimated cost of the development works (roads, water, light, etc.) that is assessed by the Superintendent of Roads and Works. In some Council, this latter fee may be paid in installments but must be finalized before approval is granted.

Several other agencies now charge fees for different activities pertaining to the subdivision of land.

41.10 CHECKLIST

The following documents are to accompany the application

- i Subdivision layout plan
- ii Longitudinal section of roadways
- iii Cross section of roadways
- iv Location plan
- v Drainage and storm water run off plan
- vi Contour plan
- vii Site investigation report (where required)
- viii Other documents (to clarify proposals).

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CHAPTER 42

SPECIAL NEEDS

42.0 BACKGROUND

The following guidelines are intended to introduce designers and builders to the minimum provisions required for safe access for disabled persons to building facilities.

The requirements and standards given in this Section should be used in conjunction with the relevant Building Code provisions and in conjunction with the specific recommendations of the bodies and institutions engaged in assisting disabled persons with the minimum provisions needed for access to all facilities.

Designers of public buildings and associated facilities in Groups A and B (a) of the draft Building Code would therefore be expected to consult the relevant bodies such as the local chapter of the institutes for the blind for specific information based on the research being carried out by these bodies.

42.1 MINIMUM PROVISIONS

The following should be considered as minimum provisions for facilities for disabled persons in wheel chairs using public buildings:

- All public buildings post offices, hospitals, asylums, sanatoria, airport terminals and sea port terminals and all other buildings in Group B (a) of the draft building code shall have provisions for the physically disabled including those persons in wheel chairs.
- ii It is desirable that other public buildings such as banks, theatres, assembly halls, hotels and cinemas, have some provisions which would allow ease of access by persons in wheel chairs.
- iii Hotels and other establishments offering accommodation to the public should have at least one bedroom for every 25 bedrooms, or a fraction thereof, made accessible for disabled persons.
- iv In new housing developments consideration should be given to constructing at least one dwelling unit in every 25 units (or a fraction thereof) to be accessible to disabled persons

Note: These Guidelines also appear in Appendix F of the Draft Building Code. (Taken from Planning and Infrastructure Standards, Organization of Eastern Caribbean States.)

The planning authorities will examine the plans for new public facilities to ensure that adequate provisions have been made for physically disabled persons.

42.2 **BUILDING APPROACHES AND ENTRANCES**

- i In every public building, at least one primary entrance at ground floor level shall be accessible from the street entrance or parking lot by means of a walkway or ramp with a gradient of not more than one in twenty. There shall be no steps or abrupt changes in grade of the access way.
- ii At every entrance there should be a level platform at least 0.9m by 1.2m to afford the opening and closing of doors by persons in wheel chairs. (See Plate). Such platforms should also be constructed at every change of grade or direction of the ramp and at 9.1m intervals on a long ramp.
- iii A clear space of 1.2m x 1.2m would allow access for both forward and side approaches to doors. A clear space of 1.5m x 1.5m is required for a wheelchair to pivot 180 degrees.
- iv Kerbs intended to be crossed by disabled persons in wheel chairs should be cut to provide a passage of not more than 10.16cm high at the kerb and at least 1.21m wide. The lip of the kerb should not be greater than 2.5cm high. Such ramps should be of contrasting colour and texture.
- v Access ramps should be provided with handrails on both sides at a height of 0.8m measured from the ramp surface to top of the rail.
- vi Gratings across entrances and walkways must be avoided. Where gratings are absolutely necessary for drainage the apertures of the gratings should not be greater than 1.9cm and the bars at least 1.27cm wide set at right angles to the direction of travel. Gratings and manhole covers should fit securely and be flush with the walk way or street.
- vii Catch basins should be constructed outside of pedestrian crossings.

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42.3 WALKWAYS AND SIDEWALKS

- i The surfaces of walkways should be constructed of non-slip covering.
- ii Walkways in passages and courtyards should be 1.4m to 2.0m wide with shoulders about 1.2m.
- iii Slopes should be no greater than 5%.
- iv Cross slopes no greater than 2%.
- v Walkway widths for persons using crutches or service dogs should be a minimum of 0.9m wide.
- vi Sidewalks should be 1.5m wide.
- vii Slopes for sidewalks should be $2 \frac{1}{2}\%$ to 5% maximum.

42.4 DOORS AND CORRIDORS (SEE FIGURE 23)

- i Doors should be openable in a single motion with one hand and with a force of no greater than 5 pounds, and should have a clear swing of at least 90 degrees. For sliding doors the force required to operate the door should not be greater than 8.5 pounds.
- ii Doorways should be a minimum of 81 cm clear.
- iii Door latches, handles and pull bars should be easy to grasp and between 0.6m and 1.2m high. Knobsets should not be used.
- iv Corridors should be at least 1.2m wide and should be equipped with an easy to grasp handrail along one side. The handrail should be at a height of 0.8m to 0.89m and be 3.81cm clear of the wall.
- v Except in confined spaces and except for doors to toilets and washrooms, all doors in corridors should open into rooms.
- vi The minimum clear floor space or ground area for wheel chairs is 1.06m x 1.2m. An area 1.2m x 1.2m allows access to doors for both forward and side approaches.

vii The space required for manoeuvring wheel chairs at doorways is given in the Table below.

Space Required for Doors and Corridors

Description	Floor Depth (m)	Space Width (m)	Required space beside latch (m)
Front approach side hinged	1.5	1.2	0.6
Pull			
Push	1.21	1.2	0.3
Latch side approach	1.2	1.5	0.6
Pull side	1.06	1.5	0.6
Push side			
Hinged side approach	1.5	1.5	0.6
Pull side	1.06	1.4	0.42
Push side			
Sliding door	1.2	0.9	0.53
Front approach	1.06	1.4	0.55
Side approach			

42.5 ELEVATORS

Where elevators are required to access upper floors at least one elevator should be constructed to meet the requirements given below:

- i Elevators should be accessible from the ground floor entrance.
- ii The elevator cab shall have a clear area of not less than 1.85msq with a minimum dimension of 1.4m.
- iii The elevator door should be at least 81.3cm in clear width.
- iv Elevators should be self levelling with a maximum tolerance of 2.5cm.
- v Control buttons should be located not more than 1.4m above the floor.

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vi Handrails should be provided at a height of between 0.8m and 0.89m.

42.6 THEATRES, CINEMAS AND AUDITORIA

- i There should be accommodation for persons in wheel chairs attending functions at public buildings as shown.
- ii Wheel chair spaces should be not less than 1.3m deep by 0.76m wide and should preferably be integrated into the regular seating
- iii Each space should be on an aisle and should be on the same level and near to an exit.
- iv Where a public address communication system is installed, headphone outlets should be provided for persons in wheel chairs at a ratio of I such outlet for every 100 seats with a minimum of two outlets required.

Number of Fixed Seating	Number of Spaces Required for Wheel Chairs	
Up to 200	2	
201 to 300	3	
301 to 400	4	
401 to 500	5	
501 to 600	6	
Over 600	6 plus I for each additional increment of 500 seats to a maximum of 12	

Number of spaces required for wheel chairs

42.7 GROUND AND FLOOR SURFACES

- i The surfaces of the ground and floor on which disabled persons must walk should be firm, slip resistant and free of glare. Any change in level should be treated as per Table above.
- ii The floor surface of detectable warning surfaces should be about0.9m long and be of contrasting colour.
- iii Floor surfaces should be slip resistant as far as possible. The slip resistance of common surfaces is given in the Table below.

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Changes in Level		
Vertical Rise (cm)	Edge Treatment	
0 - 0.63	May be vertical	
0.63 – 1.27	Should be bevelled Max slope 1:2	
over 1.27	Treat as ramp	

Slip Resistance of Floor Finishes		
Surface	Dry and Unpolished	Wet
Clay Titles	Very Good	Very Good
Carpet	Very Good	Good
Clay Tiles (textured)	Very Good	Good (External)
Cork Tiles	Very Good	-
PVC with non-slip granules	Very Good	Good
Mastic Asphalt	Good	Good
Concrete **	Good	Poor to Fair
Terrazzo	Good	Poor to Fair

Notes: * The soft weave of the carpet may make travel in a straight line difficult. ** Textured finish to concrete improves its resistance when wet.

42.8 PROTRUDING OBJECTS

Objects protruding from walls with their leading edges between 0.76m and 1.98m shall protrude not more than 0.83cm into pedestrian areas such as sidewalks, halls, corridors, etc.

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42.9 WALLS

- i Wall surfaces should not be rough or uneven and should have contrasting colours.
- ii Mirrored walls should not be used as they may be confusing to the visually impaired.
- iii Glass panels may be confused as egress routes and should be avoided.

42.10 DETECTABLE OBJECTS

The following guide should be considered in the placing of objects on walls or in rooms to be traversed or used by the physically disabled.

- i Objects with their leading edges 0.71m from the floor may protrude any amount.
- ii Objects between 0.71m and 2m from the floor shall not over hang more than 30cm.
- iii The maximum height of the bottom edge of an object with a space of more than 30cm between supports shall be 0.68m from the floor.
- iv Freestanding objects shall not overhang more than 30cm between 0.68 and 1.95m

42.11 HEADROOM

The minimum headroom – clear height from the floor to ceiling (or any supporting beam or member) is 2.1m.

42.12 BATHROOM AND TOILET FACILITIES (FOR ILLUSTRATION SEE FIGURES 22-23 & 33).

i All public buildings shall have at least one toilet specially constructed for use by disabled persons. Such toilet compartments shall carry on the door to the compartment the international sign indicating that such a compartment has been specially constructed for use by disabled persons. Plates show the planning arrangements for the toilet compartments and the international signs used for disabled facilities.

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- ii Toilet fixtures should be so placed as to facilitate the turning of a wheelchair.
- iii Handrails of not less than 2.5dm and not more than 3.8cm O.D. shall be provided on both sides of the water closet, and mounted 6cm above and parallel to the floor. The handrail should be placed with the front end about 0.6m in front of the water closet.
- iv Toilet seats should be 45.7cm to 60cm off the floor. They should be equipped with:
 - hand operated flushing controls that can be reached by persons in a wheel chair and
 - a back support
- v wash basins should be placed a maximum of 0.85 high with a clear space of at least 0.69m high by 0.9m under the basin. The wash basin should be equipped with faucet handles of the lever type without spring loading. The soap and towel dispensers should be located not more than 1.2m above the floor and be accessible to persons on a wheel chair.
- vi The bottom edge of a mirror should not be more than 0.9m above the floor.
- vii Where showers are provided in public assembly buildings at least one shower for each sex should be constructed for use by disabled persons. Such showers should not be less than 1.5m by 0.9m with a threshold no higher than 1.2cm and a curtain rising 0.9m from the back wall.
- viii Doors to toilet facilities should always open outward and be equipped with self closing hinges or door closers.
- ix Vertical and horizontal grip rails should be installed and readily accessible from the toilet and shower.

42.13 PARKING LOTS

Any parking lot servicing an entrance to a public facility shall have a number of level parking spaces identified by the appropriate international signs as reserved for

disabled persons. Each reserved parking space shall not be less than 3.6m wide (see Figures 30 & 33).

The Table below gives the suggested number of reserved parking spaces for disabled persons. Such parking spaces shall be within easy reach of an exit, and shall be so placed that the person using the space would not be compelled to pass behind other parked vehicles to access the building entrance, ramp or walkway.

Accessible Parking Spaces for the Physically Disabled		
Total Number of Parking Spaces in Lot	Required Number of Spaces Reserved for Disabled Persons	
I to 50	I	
51 to 75	2	
76 to 100	3	
101 to 200	4	
201 to 500	5	
above 500	I percent of the total number of persons	

42.14 ILLUMINATION

All spaces to be used by visually impaired persons should be provided with at least the lighting level of 100 lux.

42.15 SGNS

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For adequate recognition of signs by the visually impaired the signs should be constructed and placed in accordance with the following Table.

Signage		
Minimum Character Height (cm)	Maximum Viewing Distance (m)	
20	6	
12.7	4.5	
10	2.4	
7.62	2.37	
5	1.5	
2.5	0.76	

42.16 WIDTH OF AISLES

The minimum width of aisles for persons to allow save manoeuvring by persons in wheel chairs should be 1.0m for travel in a straight line and 1.5m to provide for a 180 degree turn. In supermarkets and other public places such as assembly halls, banks and theatres it is recommended that provision be made for 2 persons in wheel chairs to pass each other, and for persons in wheel chairs to make a 180degree turn. The recommended minimum width for aisles is therefore 1.58m.

42.17 COUNTERS

- i It is recommended that special seating arrangements be made at banks, work places and lunch counters for persons in wheel chairs. Adequate room must be provided for safe manoeuvring to approach the counter.
- ii Seating spaces at counters should have a clear floor space of not less than 0.76m by 1.2m. Where a forward approach is possible there should be a clear knee space of at least 0.76m wide by 0.5m deep by 0.70m.
- iii At lunch counters and places where it is necessary to stand or sit to be served, there should be at least one such special seat available for every 30 places. There should be at least one special counter available in banks for persons in wheel chairs.

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42.18 PUBLIC TELEPHONES

- i Wherever public telephones are installed provision shall be made for at least one telephone to be accessible by persons in wheel chairs.
- ii The maximum height of the telephone controls should be 1.4m and a clear floor space of not less than 0.9m by 1.2m shall be provided in front of the telephone. If a clear height of 0.76m is available for knee space, then the allowable floor space can extend into the knee area to a maximum of 1.2m.
- iii The minimum cord length should be 1.0m.
- iv The telephone assembly including the endorsers shall not reduce the minimum width required for safe passage in corridors, aisles or walkways.

42.19 CONTACT INFORMATION

For further information please contact: Executive Director National Environment and Planning Agency 10 Caledonia Avenue Kingston 5 Tel: Fax: Email: Website:

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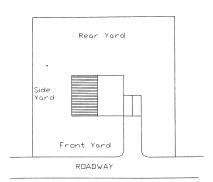
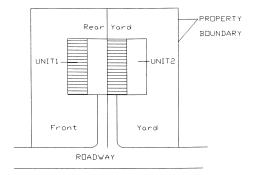
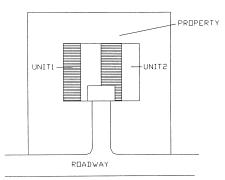


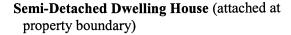
FIGURE 1 PLAN OF DWELLING TYPES

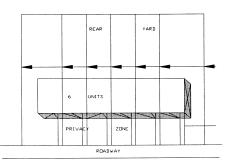


Single Family Detached Dwelling House

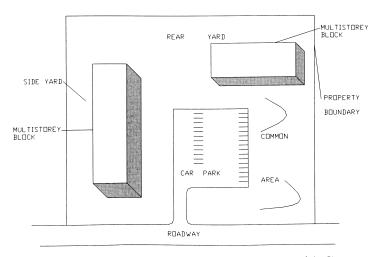


Duplex Dwelling House (one property two units)





Town House Development (units attached in Blocks Of Six Units With Private Front And Rear Yard



Apartment Building (Units Located in Multi-Storey Blocks With Common Access And Staircase)



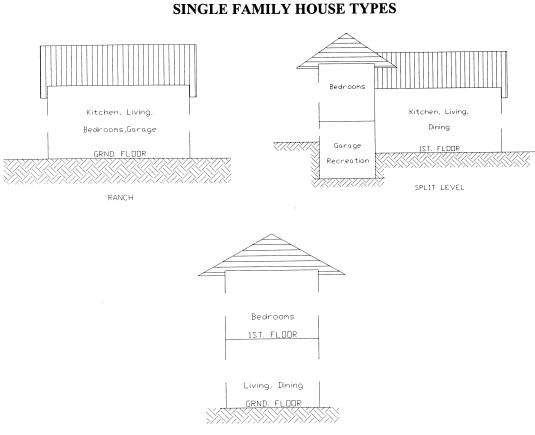


FIGURE 2



RANCH

The Ranch-type house is the traditional one-storey house. All activities, cooking, dining, living and sleeping are on one level close to the ground. This is the simplest type of construction.

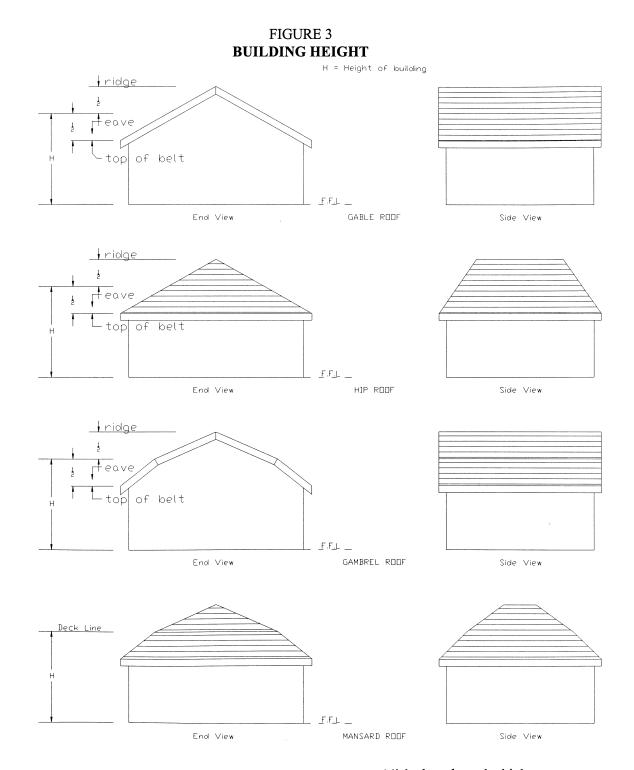
SPLIT-LEVEL

The split-level house separates the living activities into three levels. The kitchen-diningliving is the main level close to the ground. The sleeping level is located ½ level above the main level. The garage-recreation room-utility level is ½ level above the main level.

TWO-STOREY

The lower level contains the kitchen-dining-living areas. The upper floor contains

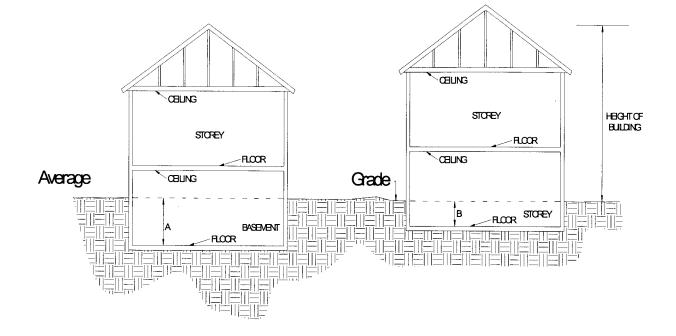
the sleeping areas.



Building Height: is the vertical distance measured from the established grade to the highest point of the roof surface for flat roofs; to the deck line of mansard roofs; and to the average height between eaves and ridge for gable, hip, and gambrel roofs.

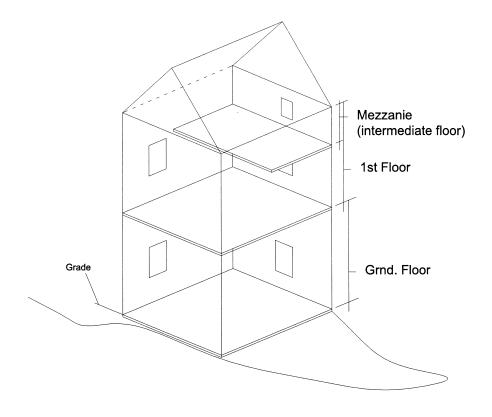
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FIGURE 4 **BASEMENT / STOREY**



STOREY: A 'storey' is that part of a building between the surface of a floor (whether or not counted for purposes of computing floor area ratio) and the ceiling immediately above. However, a basement is not a storey, when "A" is greater than "B".

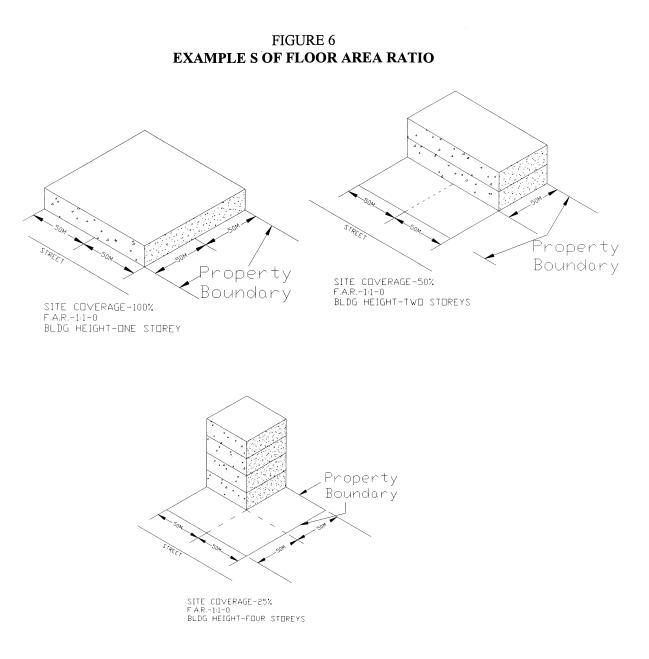
FIGURE 5 FLOOR AREA OF BUILDING



'Floor area' is the sum of the gross areas of the several floors of a building, measured from the exterior faces of exterior walls or from the centre lines of walls separating two buildings. In particular, floor area generally includes.

- Elevator shafts or stairwells at each floor
- Floor space in penthouses
- Attic space (whether or not a floor has been laid) providing structural headroom of eight feet or more
- Floor space in interior balconies or mezzanines
- Any other floor space used for dwelling purposes, no matter where located within a building
- Floor space in accessory buildings, except for floor space used for accessory off-street parking
- Any other floor space not specifically excluded.

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FLOOR AREA RATIO:

Is the total floor area of a building on a lot divided by the area of the lot. $(FAR = \underline{total \ floor \ area \ of \ building)}$ total lot area

FIGURE 7 PARKING LAYOUT

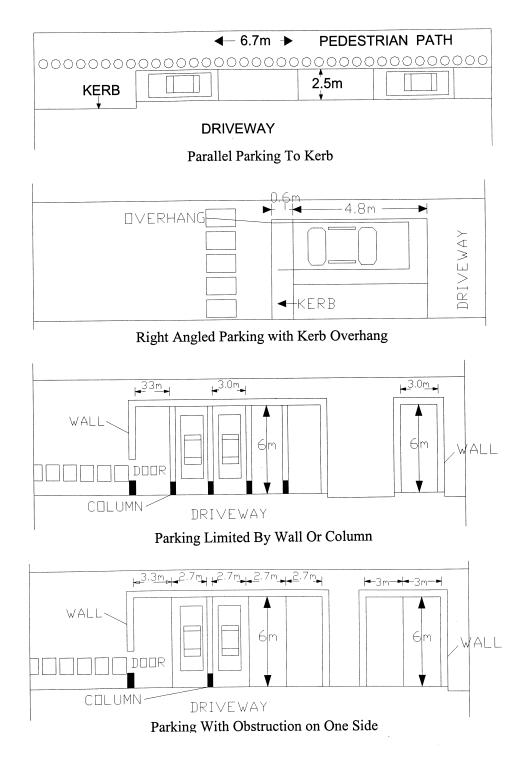
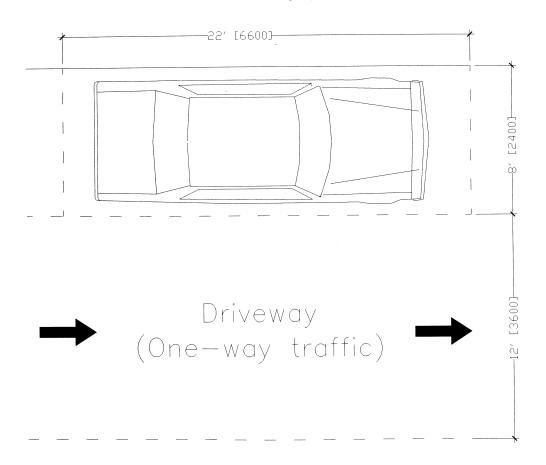


FIGURE 8 PARKING STANDARDS Parallel Parking Bay

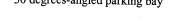


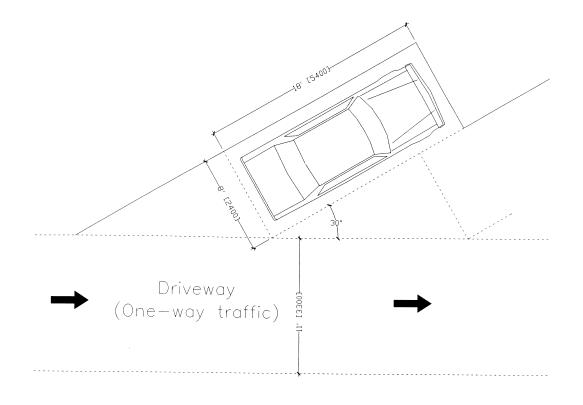
<u>Note</u>

The access road serving parallel parking spaces where the access is one-way shall be a minimum of 3.66m (12 feet) in width

FIGURE 9

PARKING STANDARDS 30 degrees-angled parking bay

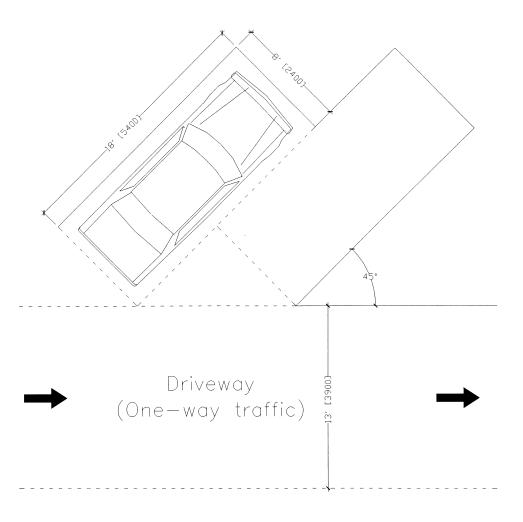




<u>Note</u> The access road serving parking spaces angled at 30 degrees shall be a minimum of 3.35m (11feet) in width.

FIGURE 10

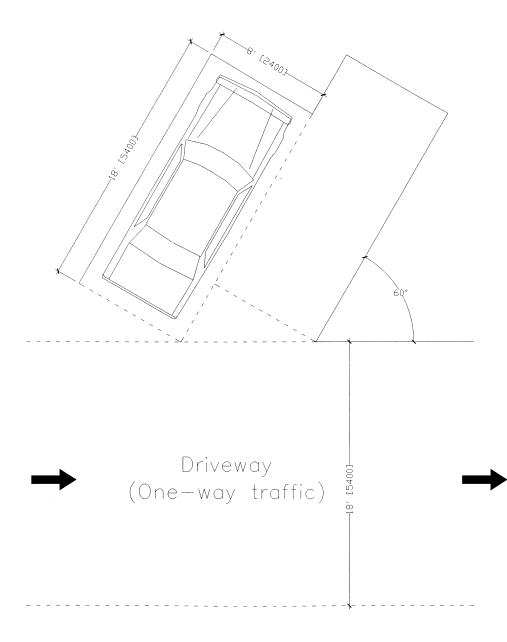
PARKING STANDARDS 45 degrees-angled parking bay



<u>Note</u> The access road serving parking spaces angled at 45 degrees shall be a minimum of 3.96m (13 feet) in width.

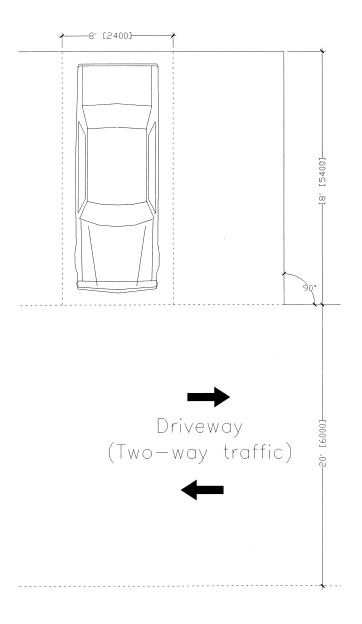
FIGURE 11

PARKING STANDARDS 60 degrees-angled parking bay



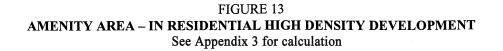
Note The access road serving parking spaces angled at 60 degrees shall be a minimum of 5.49m(18 feet) in width.

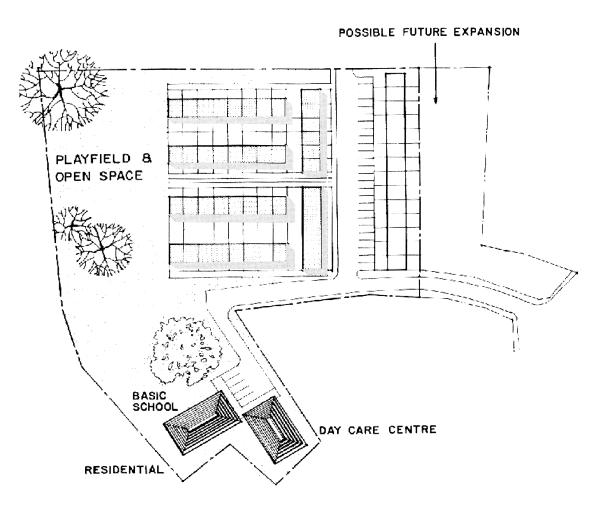
FIGURE 12 PARKING STANDARDS Right-angled parking bay



<u>Note</u> The access-way to right angled parking spaces shall be a minimum of 6.1min width for one or two way traffic.

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AMENITY AREA

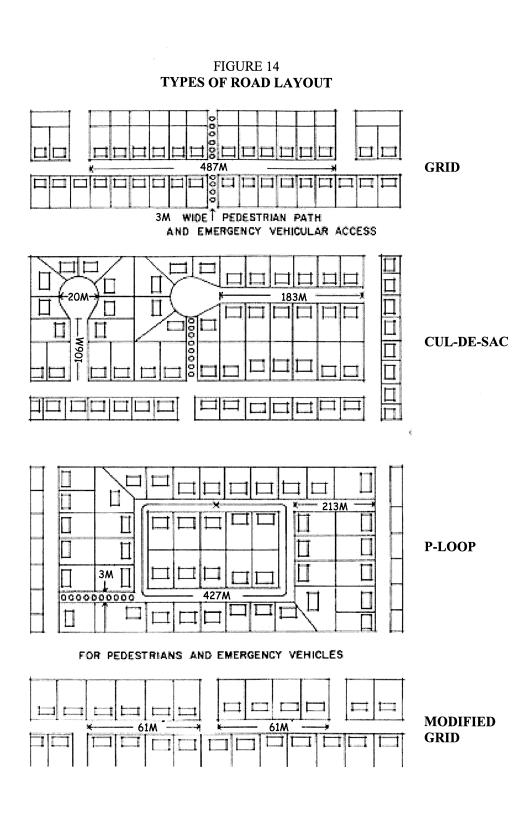
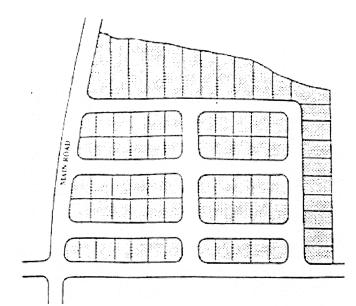
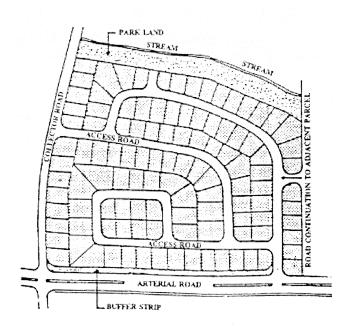


FIGURE 15 **PLOT LAYOUT**



LESS DISIRABLE LAYOUT

- Proliferated Of Access Points To Main Road
- No Hierarchy Of Roads
- No Buffer/Open Space Between Plots And Main Road/River
- Manotonous Layout
- Some Plots Of Unsatisfactory Shape



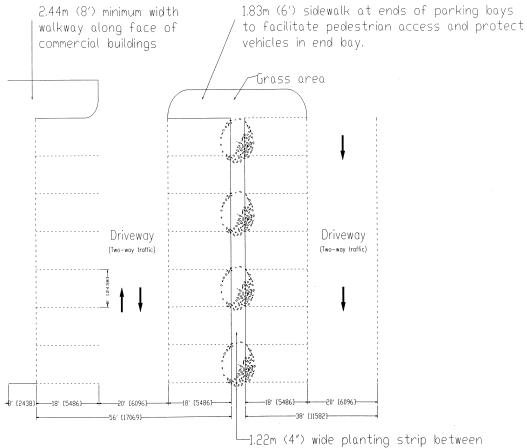
MORE DISIRABLE LAYOUT

- Hierarchy Of Roads
- Limited Access To Arterial Road
- Buffer/Open Space
 Between Plots And Arterial
 Road/Stream
- Plots Of More Adequate Shape
- More Interesting Layout

FIGURE 16 Parking Standards

90 degrees - Angled parking design

Showing Landscaping



-1.22m (4") wide planting strip between parking bays to shade vehicles, screen them from view and generally raise level of amenity.

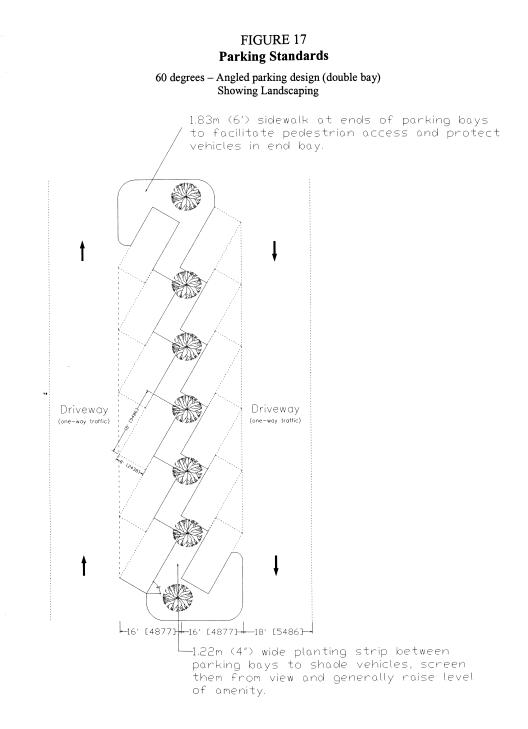
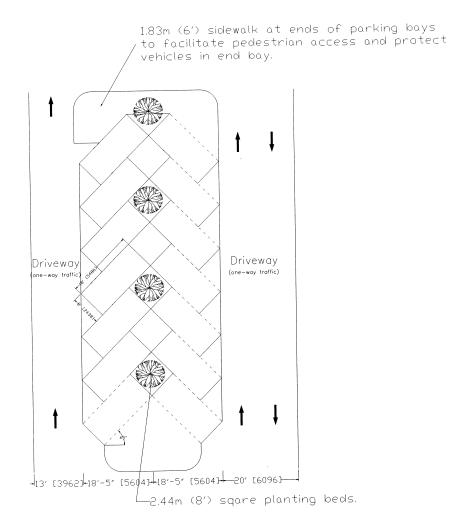


FIGURE 18 **Parking Standards** 45 degrees – Angled parking design (double bay) Showing Landscaping



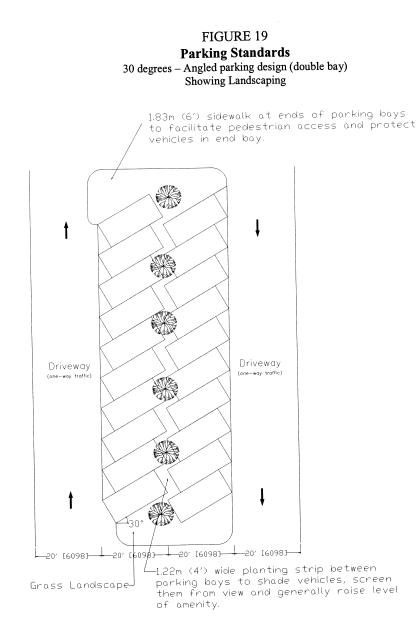
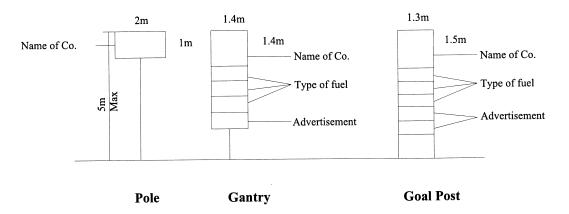
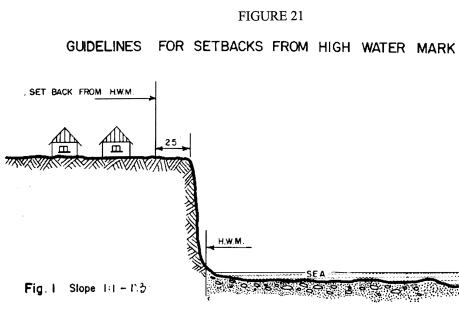


FIGURE 20

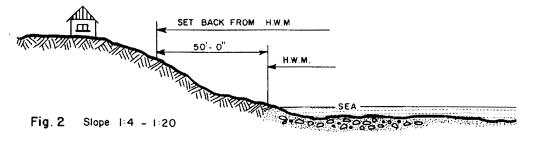
SIGNS AT PETROL FILLING STATIONS



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(SUBJECT TO NATURE OF SUBSTRATA, OCEANOGRAPHIC CONDITIONS PLANS FOR SEASIDE PARKS, etc.)



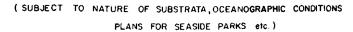
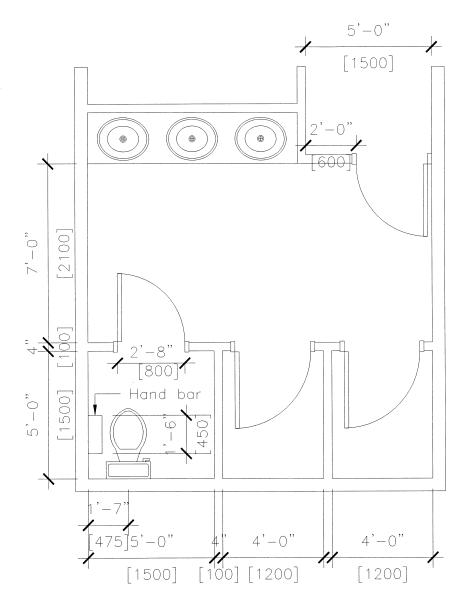


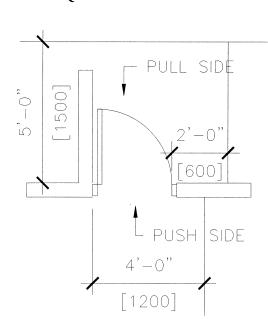
Figure 22 LAYOUT OF WC FOR DISABLED PERSONS

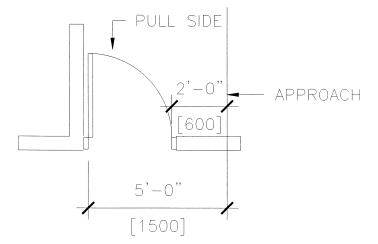


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FIGURE 24 **ROAD SECTIONS** (HOUSING ESTATE ROADS)

MAIN ROAD (RESERVATION WIDTH 22.5M)

		րություն			
1500 1800 <u>1</u>	7200mm	1500	7200mm	1800	1500
Sidewalk Sidestrip	Carriage Way	Midstrip	Carriage Way	Sidestrip	Sidewalk

MAIN ESTATE ROAD (RESERVATION WIDTH 15M)

100 00 00 00 00 00 00 00 00 00 00 00 00			
1500 1800 1	8400mm	1800 15	500
Sidewalk Sidestrip	Carriage Way	sidestrip Sid	ewalk

ESTATE ROAD (RESERVATION WIDTH 12M)

		յուն առաջու <mark>յ</mark> ել			⊢
	1200	1800	6000mm	1800	1200
< .	Sidewalk	Sidestrip	Carriage Way	Sidestrip	Sidewalk

T.

SERVICE ROAD PARALLEL TO A MAIN OR MAIN ESTATE ROAD RESERVATION WIDTH 9M

1500 L	6000mm	1500
Sidewalk	Carriage Way	Sidewalk

FIGURE 25

HIERARCHY OF ROADS IN A SUBDIVISION

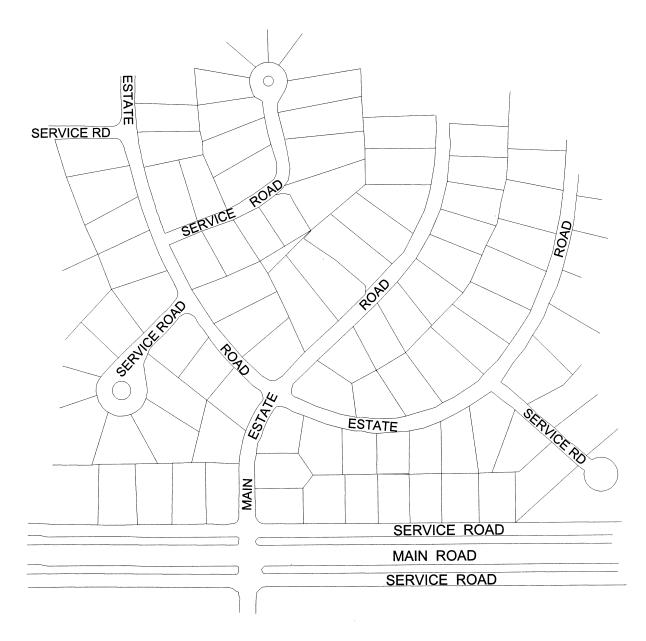
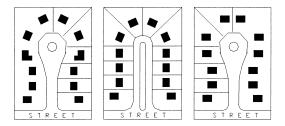
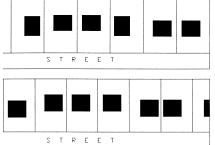


FIGURE 26

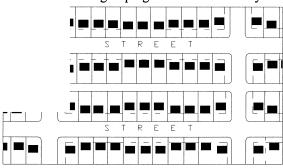
VARIATIONS IN SETBACK OF BUILDINGS



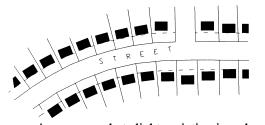
ged with appearance of spaciousness



ns in groupings to avoid monotony

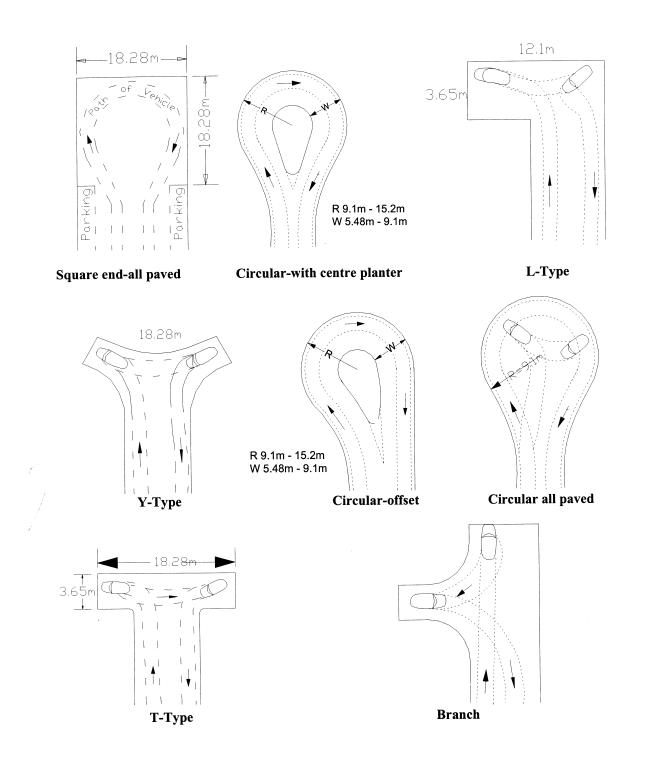


Variations in setback of houses to avoid monotony



Monotony is overcome but slight variation is welcome

FIGURE 27 TYPES OF CUL-DE-SAC AND DEAD-END STREETS





RECTILINEAR

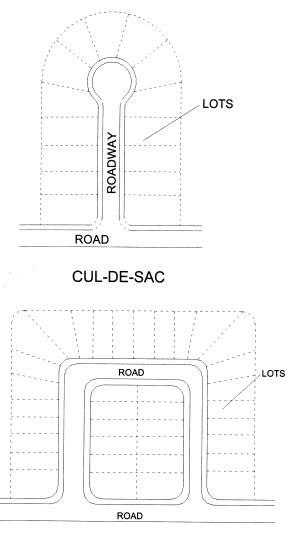


CURVILINEAR

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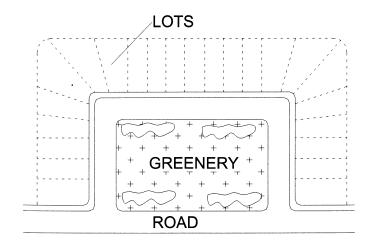
Volume 1, Section 1

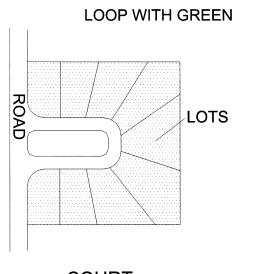
FIGURE 28A SUBDIVISION ROAD PATTERNS



LOOP



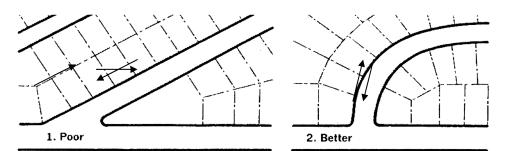




COURT

FIGURE 29

INTERSECTION DESIGNS



Hazardous angle intersection, creating awkward turning movements.

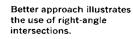
Intersection

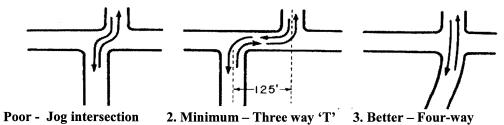
The dangerous jog

intersection forcing

precarious turning

movements.





Intersection

Intersection

Intersections which cannot be aligned should be separated by a minimum of 125 feet between centerlines By slightly curving one of the unaligned intersection streets, a dangerous jog can be avoided.

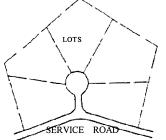
NATIONAL ENVIRONMENT AND PLANNING AGENCY

Volume 1, Section 1

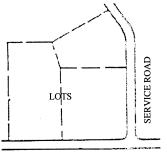
FIGURE 30

PLOT DESIGN

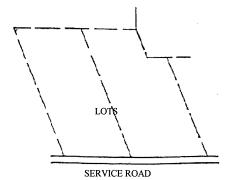
MORE DESIRABLE PLOT LAYOUT



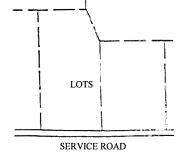
MORE COMPACT PLOTS



BETTER CORNER PLOT ARRANGEMENT



SLANTING PLOTS

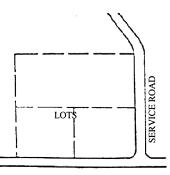


PLOTS AT RIGHT ANGLE TO STREET

SERVICE ROAD

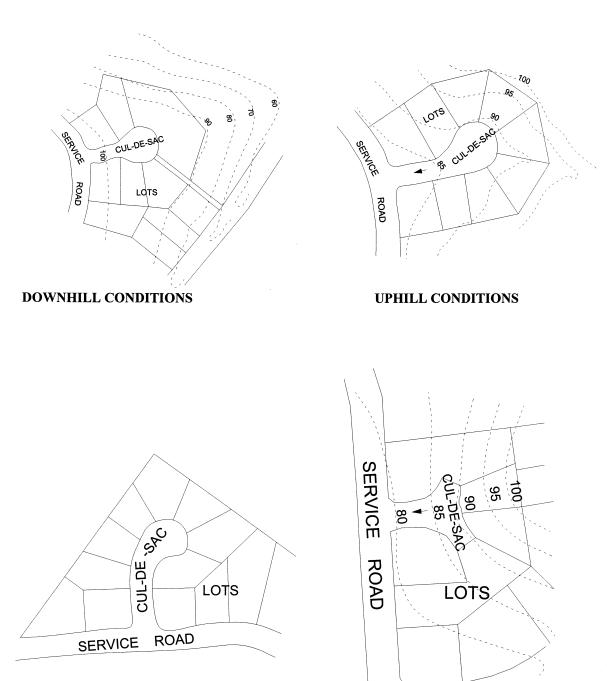
LESS DESIRABLE PLOT LAYOUT

EXCESSIVELY DEEP PLOTS



LESS DESIRABLE CORNER PLOT ARRANGEMENT

FIGURE 31

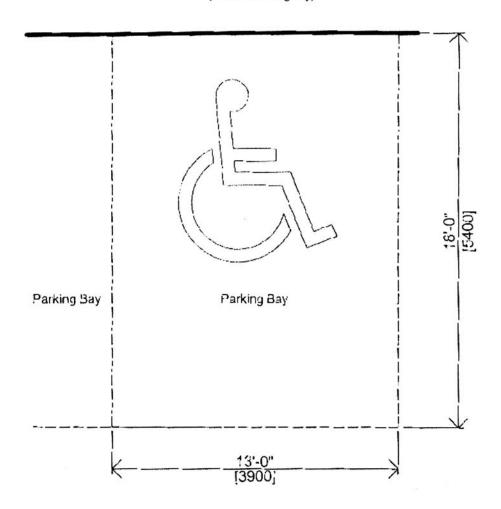


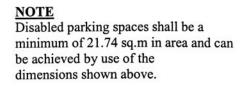
LOTTING AROUND CUL-DE-SAC

NORMAL CONDITIONS

'Y' TERMINAL FOR A SHORT CUL-DE-SAC

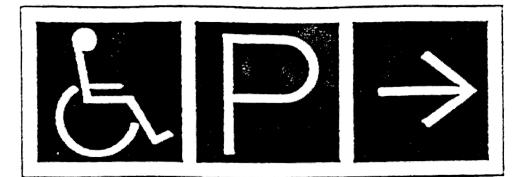
FIGURE 32 PARKING STANDARDS (Disabled Parking Bay)





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FIGURE 33 INTERNATIONAL SIGNS FOR THE PHYSICALLY HANDICAPPED





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APPENDICES

APPENDIX I Glossary of Terms

APPENDIX 2 Flow Chart for Development Applications

APPENDIX 3 Flow Chart for Subdivision Applications

APPENDIX 4 Sample of Subdivision Application

APPENDIX 5 Sample of Subdivision Application Form

APPENDIX 6 Bibliography/Literature Review

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GLOSSARY OF TERMS

The following are not legal definitions but a glossary of terms used in development and planning:

- □ Average Daily Traffic (A.D.T.) It is the average 24 hour volume for a given year; the total being for both directions of travel unless otherwise specified.
- Accessory Building A non-residential building, serving a main building and located on the same lot, e.g., tool shed, filter house, etc.
- □ Agriculture-means the cultivation of the soil for any purpose, the breeding and keeping of livestock and fish, the keeping of apiaries, the use of land for grazing, meadows, nurseries, the growing of economic fruit trees and woodlands where this is ancillary to other agricultural activities.
- □ Amenity Area An area or areas within the boundaries of a development intended for leisure purposes that may include landscaped site area, communal lounges, swimming pools, etc.
- □ Apartment Building A multiple dwelling building comprising three (3) or more dwelling units with shared entrances and other essential facilities and services and with shared exit facilities provided for dwelling units, located above the first storey.
- Authority The Town and Country Planning Authority, appointed pursuant to Section 3 of the Town and Country Planning Act (Law 42 of 1957).
- Local Authority (a) In relation to the Parishes of Kingston and Saint Andrew Corporation
 (b) In relation to any other Parish, the Parish Council of such Parish.
- Local Planning Authority In respect of any area in the parishes of Kingston and Saint Andrew, the Council of the Kingston and Saint Andrew Corporation and in respect of any area in any other parish, the Parish Council of such parish provided that any such area situated within two or more parishes, the Local Planning Authority shall be such person or body as the Minister in charge of planning may, in writing appoint.
- □ **Backland Development** Development which takes place to the rear of existing structures fronting a street or roadway.
- **Barrier Kerb** Concrete kerb having a vertical face, adjacent to the roadway
- □ **Building** Any structure or erection and any part of a building so defined but does not include plant or machinery comprised in a building
- **Building Area** The total area occupied by a building excluding terraces, steps and ramps.
- □ **Building Line** a line established from an officially designated centre line or boundary of a street from which all front and street setbacks required are measured or determined.
- Built up Area-land forming part of the urban area which is either developed, committed for development or the subject of a new allocation. It is a policy boundary concept rather than what exists and is the area within which the general presumption is in favour of developed.
- Car Port An accessory structure or portion of a principal structure consisting of a roof and supporting members such as columns or beams, unenclosed from the ground to the roof on at least two sides and designed or used for the storage of motor vehicles, owned and used by the occupants of the building to which it is accessory.
- **Commercial Development-**development for the provision or supply of goods and services by wholesale or retail.

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- Community Facilities Facilities common to the whole development including such things as community halls, shopping, medical and dental clinics and other similar facilities.
- □ Cross Slope Means the percentage of natural grade across a tract or parcel of land measured from the highest point to the lowest point.
- **Cubic Content-** of a building or structure is determined by multiplying its area by the height using external measurements.
- **Density-** the number of habitable rooms that will be allowed per hectare of land.
- Developer The owner or any authorized person who intends to improve or carry out improvements upon a property.
- Development The carrying-out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land.
- □ Driveway Is an access way from a public street or roadway to dwelling units, garage compounds, parking area, service areas of buildings etc. Their widths range from 9 12 ft. for single lane driveways and 15 18 ft. for double lane driveways
- □ **Dwelling House** a building or part of a building forming a self-contained premises designed to be occupied by a single family, household or individual and does not include a building containing one or more flats.
- □ **Dwelling House/Multi**-Family A building or group of attached buildings, other than a hotel, containing three or more dwelling units.
- Dwelling House/Detached A dwelling house free standing on its lot with set-backs from all lot boundaries.
- Dwelling House / Semi-Detached A building containing two units, separated by a boundary wall and with each section having a separate lot.
- □ **Dwelling House** / **Duplex** Two dwelling units one above the other or side by side on the same lot.
- □ **Eaves** The portion of the roof of a structure which projects beyond the exterior building wall or line.
- Ecological Sensitive Area-an area which is vulnerable to natural disasters and human impact.
- □ Environmental Impact Assessment-a study of the environment to detect how a development would impact on it in the area in which the development is proposed.
- **Façade-**any exterior surface of a building other than the roof.
- □ **Farmstead**-all building and structures on a farm of 2.02 continuous hectares or more in size that are used primarily for agricultural purposes such as housing animals, storing supplies, production or machinery.
- □ **Flat**-separate and self-contained premises constructed for use as a dwelling and forming part of a building from some other part of which it is divided horizontally.
- Floor Area-the gross horizontal area measured from the exterior faces of exterior walls or exterior supporting columns for any floor not enclosed by exterior walls together with any floor space provided for mechanical equipment, elevator shafts and staircases at each floor other than basement space used as car parking facility.
- □ Floor Area Ratio (FAR) Is the ratio of floor area to land area expressed as a percent or decimal that is determined by dividing the total floor area on a lot, by the lot area.
- □ Free Standing Sign-A stand alone sign that generally has one or two columns supporting it.

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- □ Garage, Parking A building or portion thereof, designed or used for temporary parking of automotive vehicles but within which no vehicles shall be stored, equipped, repaired, hired or sold.
- □ Garage, Repair A building or portion thereof other than a parking garage, designed or used for repairing equipping or servicing of automotive vehicles. Such garages may also be used for hiring, storage or sale of automotive vehicles.
- □ Grade Separation A structure introduced at the junction of roads to separate conflicting traffic.
- **Gradient** The relationship of the vertical distance of a slope to its horizontal distance.
- □ Habitable Room Any room or space intended primarily for human occupancy, other, than kitchens and bathrooms, or a storeroom not exceeding 6.5square metres in area; in hotels, hotel bedrooms for guest or staff.
- □ Hedgerows A natural or semi natural row of bushes, shrubs, and/or trees forming a boundary.
- **Homestead** A property (farm) with a dwelling primarily used as a permanent home.
- □ **Hotel** A building or group of attached or detached buildings containing not less than ten dwelling or lodging units in which 50 per cent or more of the units are lodging units.
- □ **Industry**-one in which the use carried on is involved or is incidental to the making of any article or part of any article or the altering, repairing , ornamenting, finishing, cleaning, washing, packing, canning, or breaking up or demolition of any article or the extraction or processing of minerals.
- □ **Industry, Light-**an industry in which the process is such that it is suitable for location adjacent to or in close proximity to residential development although not necessarily within the area itself.
- □ Infill- the development of a vacant site within a substantially developed area in which the bias is to preserve the status quo.
- □ Landscaping A maintained area of which a portion is devoted to plants which are rooted directly into the ground.
- □ Landscaping Hard The use of inorganic and inanimate materials, for example rock and stone in the landscaping of an area, frequently including artificial and man made objects, such as seating, paving, railways, etc
- □ Landscape Plan A plan which shows the location, species, and size of all major vegetation to be retained, removed, or planted, as well as all other aspects of "landscaping".
- □ Landscaping Soft The use of water and natural vegetation, including trees, plants, shrubs, in the landscaping of an area.
- □ Lodging Unit A room or rooms connected together consisting of an independent housekeeping unit for a family that does not contain any kitchen.
- □ Mixed Use Development A development that includes, more than one land use in addition to residential, and in which the subordinate (commercial and office) use is compatible with, and to some extent provides services to the residential development. It may refer to a mixture of uses within a building or within a larger spatial unit, such as a block or a square.
- □ Non-Habitable Room A room designed for sanitary facilities, store, kitchen, or other uses not intended primarily for human occupancy.
- Office A place in which clerical and administrative work is undertaken or a place used for transacting business.

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- Owner / Occupier The owner of the land in fee simple who occupies any structure erected on the property although sections of same may be tenanted.
- Performance Bond A legal agreement with the planning authorities to complete a development or certain aspects of a development within a specific time period. Approval for other sections of the proposal is based upon the developers' performance during this phase.
- Planning Permission Permission for development which is required by virtue of Section 10 of the Town and Country Planning Act (Law 42 of 1957).
- **Professional Office** A place used by professionals for the practice of their profession.
- □ **Public Open Space** Land which is not in private ownership and is open to use by the public.
- □ **Public Way** Any street, highway, alley, pedestrian way, bridge, easement, right-of-way or other way in which the public has a right of use for passage.
- Residential Density In relation to any area, means the number of habitable rooms per hectare and is calculated by adding together all habitable rooms in a selected area and dividing by the acreage.
- □ **Roadway** The portion of a right-or-way for a street, highway, or alley, designed or used to accommodate the movement of motor vehicles.
- □ **Road, Main** A road built and/or maintained by the Ministry of Construction (Works). Normally they are roads linking towns.
- **Road, Parochial** A road built and/or maintained by the Parish Council
- □ **Road Service** A street adjacent and approximately parallel to and separated from a highway or other public street and which affords access to abutting property.
- □ **Road Shoulders** Structural portion of road on either side of pavement at same level as pavement (roadway).
- □ **Round-about** A rotary introduced at an intersection of roads to ensure the smooth merging and operation of traffic flows.
- **Rural Area** Lands outside the built up areas or coastal areas.
- □ Satellite Antenna- An apparatus designed for transmitting microwave radio energy to satellites on receiving it from them, and includes any mountings or brackets attached to such apparatus.
- □ Seeding and Phasing Number of lots that are to be developed within a given time period in a specific section of a subdivision.
- Setback The distance of the forward most part of the building from any of the property boundaries.
- □ Shop A building used for the carrying on of any retail trade or retail business wherein the primary purpose is the selling of goods by retail and, without prejudice to the generality of the foregoing, includes a building used for the purpose of a hairdresser, undertaker, travel agency, or as the receiving office for goods to be washed, cleaned or repaired, or for any other purposes appropriate to a shopping area, but does not include a building used as funfair, garages, petrol-filling station, office or bank premises.
- □ Site Coverage- The portion of the site that is occupied by covered or uncovered building or structure and is determined by dividing the total site area by the area built on.
- Special Conservation Areas These are areas which the Natural Resources Conservation Department has indicated and which are to be the subject of controlled management of development. They are areas of high natural productivity such as wetlands; areas of outstanding landscape beauty; areas of outdoor recreational potential; areas of special

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scientific interest due to the presence within them of unique flora or fauna; areas with vulnerable watersheds; flood plane areas; areas to be secured for public beaches, national parks, seaside parks, or access along coastlines and all coral reefs within the territorial waters.

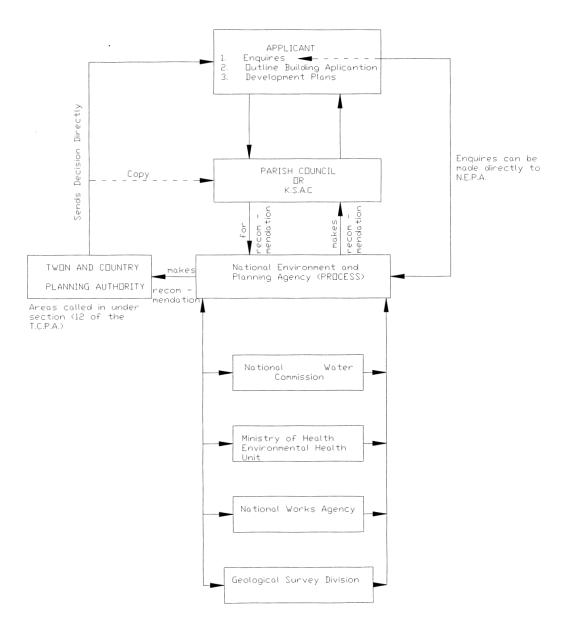
- □ Sidewalk Raised portion of pavement structure constructed as pedestrian way and having a barrier-type kerb wall, adjacent to the roadway.
- Street Is any public right-of-way for vehicular purposes that provide access to more than two (2) zoning lots.
- □ Street, Collector (or Estate Roads) A street which collects and distributes vehicular traffic moving between major streets and minor streets and which generally provides direct access to abutting properties and includes the principal entrance streets of a residential development.
- □ Street, Cul-De-Sac A street that is designed to remain permanently closed at one end, with the closed end terminated by a vehicular turn-around. For the purposes of these regulations, the length of a cul-de-sac street shall be measured from the centre line of the intersecting street along the centre line of the cul-de-sac to the centre of the radius of the turn-around.
- Street Furniture Fittings and fixtures installed in streets such as lamp posts, fire hydrants, street signs, benches etc.
- Street, Major (or Main Estate Roads) A street carrying the vehicular traffic of minor and collector streets
- □ Street, Minor Any street, other than a collector street, major street, or highway providing direct access to abutting property and serving local as distinguished from through traffic.
- □ Structure Anything constructed or erected with a fixed location on the ground, or requiring a fixed location on the ground, or attached to something having or requiring a fixed location on the ground.
- □ Studio- A self contained dwelling unit of one habitable room that has a kitchen and bathroom.
- □ Subdivision Improved or unimproved land or lands divided or proposed to be divided into two or more lots, parcels, sites or other divisions of land for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such parcels and shall include re-subdivision, and when appropriate to the context, shall relate to the process of subdividing of the land or territory subdivided.
- □ Sub-divider A person, firm, corporation, partnership, association, trust or other legal entity or combination of any thereof who or which causes land to be subdivided into a subdivision for himself, itself or for others.
- □ **Tee-Junction** A junction at which one road ends on another (usually a more important road) in the form of a "T".
- □ **Town House-** A one family two or three storey dwelling in series with a group of two or more such dwellings each located on a separate lot and separated from each other by an adjoining fire wall or walls without opening in such walls.
- **Upgrading** The provision of amenities and utilities such as light, water, sewerage and proper road and surface drainage facilities in spontaneous settlements (slum).
- □ **Urban Renewal** The planned re-development of deteriorated and deteriorating areas so as to create better communities and eliminate and prevent slums and blight.
- Warehouse- A building or land used temporarily for the purpose of storage or distribution of goods and materials.

Appendix I

- □ **Yard** Total lot space not occupied by buildings; back, front and side yards refer to parts of the yard in relation to the main building.
- **Y** Junction Is a roadway in which all three legs are of equal importance.

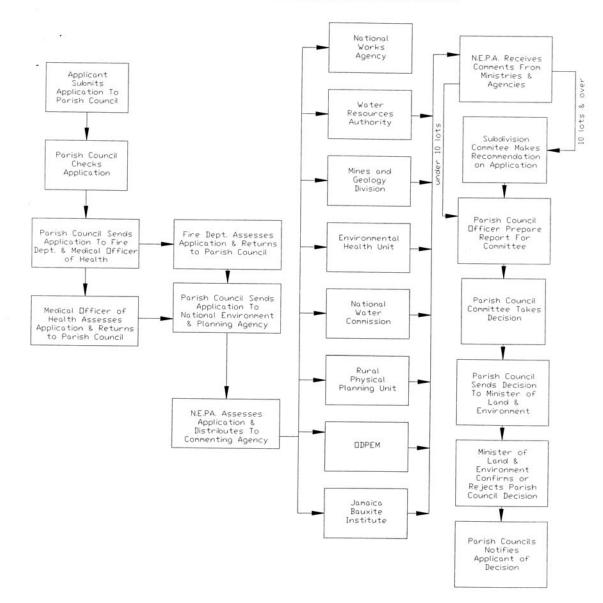
Appendix 2

FLOW CHART FOR DEVELOPMENT APPLICATIONS



note: A minimum of six (6) copies of plans must be submitted Additional copies to satisfy Agency needs will be requested Source: Manual For Development (1982)

Appendix 3



FLOW CHART FOR SUBDIVISION APPLICATIONS

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Source: Customer Service training for Parish Council and K.S.A.C. Staff

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Appendix 4

SUBDIVISION APPLICATION

Under the Local Improvements Act (1914)

Instructions

General

PLEASE NOTE: ALL APPLICATIONS MUST BE ACCOMPANIED BY THE FOLLOWING DOCUMENTS, FORMS AND CONTAIN THE FOLLOWING INFORMATION. APPLICATIONS NOT MEETING THE REQUIREMENTS WILL BE RETURNED.

- Six copies of this form should be filled out and lodged with the Local Authority, which are the KSAC and the Parish 1. Councils.
- 2 Submit plans as follows:

A DELEVIS.		Requirement
1 lets and under	-	15 copies
to test and under to test and over	-	18 copies

- In addition a signal copy of plans will also be accepted. Any digital plans submitted will be for the processing of this 3. opyrights will not be infringed. application only.
- All layout plans should be accurately drawn to scale showing dimensions (in metric) and shape of lots, areas and lot numbers. The widen of all existing and proposed roads and access ways, and their grades and profiles, access to existing public road ways from the subdivision, all existing building e.g. adjoining owners, where appropriate area(s) for solid waste storage facilities and detailed access to this/these area(s), telecommunications network including cellular towers on 4 subject and or/ adjoining porperty e/c, also particulars of any outstanding natural and cultural features, e.g. Cliffs, ponds, wells, sinkholes, spring and heritage sites should be shown.
- description of the location and access to the set for rural areas and 1: 1,250 or 1: 2,500,1:5,000 for urban areas. A 5 geo ordinates of the site may also be provided.
- Existing and proposed drainage details ar to be accurately shown on all subdivision plans. 6.
- Detailed plans for river or gully training works should be submitted where applicable. 7
- 1/1000, 1/2000, 1/4000 Subdivision plans should be drawn to one of the following scale 8
- All applications for non-agricultural subdivisions being 10 loss and ist be accompanied by a site investigation 9 up with the Ministry of Health, Environmental report and soil percolation test report. Applicants are advised Health Unit (EHU) and Mines and Geology Division (MG) for guidelines in eparing above reports.

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and over.

- Contour lines are to be shown for sub-divisions over 15% gradient 10
- Where necessary additional information should be stated on plain paper and attached 11.
- 12. Completed Project Information Forms (PIF) must be submitted to NEPA for all and align
- All subdivision plans to be dated and signed by a Commissioned Land Surveyor. 13.
- 14. Drainage plans for all applications 10 lots and over must be dated and signed by a Registered Engineer.
- 15. Documents and information submitted must be indicated by ticking () the appropriate boxes on the checklist on pages 2-4
- 16. If the property is affected by the Restrictive Covenant Act this should be specified.

Subdivision Checklist		
Six copies of the application forms Are To Be Completed		
(To be filled out by the applicant and checked by the Local Authority)		
1. Proof of Ownership - The following documents must be submitted to confirm ownership		
Certified copy of Original Registered Title or		
In the absence of registered title the following certified copies of documents in combination are acceptable:		
Common Law Title or		
Probated Will & Surveyors report/diagram or		
Letter from Attorney or Government Agency for Land Settlement		
Authorization letter from owner, if the owner is not an applicant. Authorized letter must be stamped by Justice of the Peace (JP)		
2. Assessment Documents - The following documents must be submitted to allow for an assessment		
Up-to-date Property Tax receipt		
Valuation Report or Certificate (not more than a year)		
Layout plans		
Estimated cost of infrastructure works for the entire subdivision		
3. Registration - The following must be submitted to complete the registration process		
Documents submitted at 1 & 2 (above) and the following		
Processing fees		
4. Information - the following are requirements by NEPA for Subdivision 10 lots and over		
Environment Permit Application for 10 lots and over		
Environment License Application for 10 lots and over		
Form Ref:RevisedversionofForm-SubdivisionApplication(113.doc Last Revised: 2003-07-22		

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Appendix 4

Checklist continue...

	Plans-The following documents will provide deta <u>ATION PLAN/DIAGRAM</u> Shows where the subdivision is located in relation to surrounding areas.	INFR/	ASTRUCTURE/SERVICES continue. s layout continue.
•	To be done at a scale of: Urban Areas – 1:5,000, 1:2,500 or 1: 1,250		Longitudinal & cross section of new roads
	Rural Areas – 1: 12,500, where map scale is not available 1:50, 000 including other maps		Width of all existing roads and Access ways
	& written details		Width of all proposed roads and Access ways
Layo	ut Plan (accurately drawn to scale)	Drain	age
	Area of land (to scale) showing boundaries of lot inclusive of roads and open space.		Comprehensive drainage plan showing drainage pattern (natural), storm water flow
	Dimensions	10.000	and features including adjoining properties.
	Schedule of lot numbers and areas		All proposed drainage features such as culverts etc.;
	Particulars of any outstanding features such as cliffs, ponds, cellular towers etc.		Proposed surface water drainage detail accurately drawn to scale;
	Scheduling outlining the proposed use of each lot including the remaining lot where applicable. The non-residential uses should be clearly demarcated		Existing surface water drainage detail accurately drawn to scale;
	on the plan		Details for the safe disposal of run off along
	Location, type (s) & use (s) of existing structure (s)		the proposed road to point of final off site disposal
	Field note for the outer boundaries		Details of river and gully training works
	Meridian to which plan is drawn	Util	lities
	Proposed phasing, if any clearly demarcated on the plan	Wat	Water mains layout Distribution System
	Name, signature, occupation, address of owner & agent		plan. For subdivision 20 lots & over Water certificate (KSAC requirement) to be lodged with the application
	Contour lines for gradient 15% and over		ctricity Electrical Distribution system plan for subdivisions 20 lots and over
	Orientation of layout (North Sign)	Sew	
	Identification of mined out areas and quarries should be made where these occur on the proposed site or on the adjoining property.		Fire Approval (RSAC requirement) to be lodged
INFR	ASTRUCTURE/ SERVICES		with the application Existing hydrants
	Name of existing roads	Soli	d Waste Disposal Description of Service required (i.e.house
	Name of proposed roads	Tel	to house or skip collection) ecommunications Telecommunications network. This would
	Grade of all road & access		include cellular tower, transmission towers/masts etc.

6. Report ar	nd Plans-The following documents will provide detailed information on the engineering component of the proposed development
	Water supply Maximum & Minimum Service Pressure Pipe Diameters Design & justification of design; Reservoir station; Outer pumping needs
	Waste Water Treatment Population data and flow estimates Soil properties Justification of proposed design Process diagram of treatment Design calculations and dimensions Plans for final effluent disposal Plans and maintenance procedures for handling of grease, grit, studge and screening Provisions for maintenance programme Recovery, reuse and recycling of wastewater
	Solid Waste Management Plan For subdivision 20 lots and over
□ -	Soll percolation test report A soil percolation test report must be submitted where subdivision is for (10) lots and over.
	PIF (Project Information Form) to be submitted to NEPA for the development
	Application for Permit & Licence (to be submitted to NEPA)
	Land scape Plan Type of trees (width, length etc.) Street furniture
	Hazard impact assessment if applicable
、	Planning Report Sub-division in excess of 100 lots and or in access of 22.25 hectares (50 acres). Indicating the rationale for the proposal, provision of social and physical infrastructure, location of nearest settlement, slope analysis etc.
Form Ref:Revise Last Revised: 20	edversionofForm-SubdivisionApplication(113.doc 03-07-22

Appendix 4

V

Date	of Application	
	Check list	Checked by
		Date
	Site Investigation Report	Completed by
		Date
	Planning Report	Completed by
		Date
_	Zoning	
	Area zoned for proposed use	Checked by
	Area not zoned for proposed use	Date
	Regulation requirements	
	Civic number/identity	Assigned By
		Date
	······	
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NATIONAL ENVIRONMENT AND PLANNING AGENCY

Subdivision Application Form		
Subdivision Application Form		
Information Section		
Section 1: Give details of how the site can be located for inspection, if necessary. Provide street name and valuation number if these exist. If not, provide distance from an outstanding landmark such as milepost, business place, prominent residence etc. or name of persons who can be contacted locally. Planimetric sheets (1:1250, 1:2500, 1:5000,) should be used for sites within an urban area and topographic sheets (1:12,500) for other areas.		
Section 2: If the property is not recorded at the tax office in your name, you are considered the agent. If you are applying as an agent, supply the information for both the landowner and yourself.		
Section 3: For residential subdivision in excess of 10 lots, open space for community purposes should be provided at the ratio of one hectare for each 100 lots. If the subdivision is less than 10 lots, write "N/A" in line (d).		
 (b) i) For Multifamily developments the minimum common amenity area ^{\$\phi\$} for each unit should be provided as follows: Studio - 13.93 m² 1-Bedroom - 27.87 m² 		
• 2- Bedrooms & Over - 55.74 m^2		
ii) For parking requirements (see A Manual for Development, under the Development Standards for Parking)		
Section 4: (a) If this is a multi-purpose subdivision the existing and proposed uses for all the lots in the sub-division and the number of lots to be used for each activity should be stated.		
(b) Please see Land Development Classification for details of land uses (available at NEPA and all Local Planning Authority.		
Section 5: If a package treatment plant will be used as the means of sewage proposal, preliminary approval should first be obtained from the Ministry of Health (in the Environmental Health Unit). Details of the system should then be submitted along with this application for final approval. If the proposal is for less than 21 lots, write 'N/A' in each of the boxes in lines (e) and (k).		
If 'other' then details should be given.		
Solid Waste Disposal in line (i) refers to whether the service of collection is provided for the community where the subdivision is proposed.		
Section 6: (a) Recommended minimum lot sizes for residential purposes are 371.609 m ² (4,000, sq ft) in urban areas and 1011.75 m ² (¹ / ₄ acre) in rural areas. Agricultural lots are to be a minimum of 2 hectares (5 acres each). If lot sizes do not conform to the above, line (a) must be completed.		
(b) Lines (a) and (b) should be completed if a change of land use is contemplated, e.g. from agricultural to residential. Note: temporary limitations, e.g., unavailability of water for irrigation purposes, will not necessarily be a reason for removing land from agricultural use.		
(c) Supply any other information, which you think will assist in the processing of the application. A certified copy of the original document showing ownership should accompany the application.		
Section 7: The selection of an appropriate sewage disposal system for the site depends on the local hydrogeology. The Resources Authority (WRA) should also be consulted.		
⁹ An area within the boundaries of a project intended for leisure purposes, which may include landscaped site area, communal lounges, swimming pool, etc. Form Ref: RevisedversionofForm-SubdivisionApplication(113.doc Last Revised: 2003-07-22		

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	т	The Application
To all	ensure the accurate and efficient processing of this ap sections completely, supply clear and concise answer	oplication and to avoid delay, supply all the required information. Fill out is based on the opposite page and sign the application.
<u> </u>	PROPERTY	
	a) Name of property/subdivision	· · ·
	d) Name of Parish	
	e) Planimetric Sheet No.)	(f) Topographic Sheet No
	g) Title Registration: Volume (S)	(h) Folio (S)
	i) Land Val. No	
<u>7.</u>	APPLICANT	
	LAND OWNER	AGENT
	Name	Name
	Mailing Address	Mailing Address
	Tel No	Tel No
	E Mail Address	E Mail Address
	TRN	TRN
		· · · · · · · · · · · · · · · · · · ·
3.	SIZE ALLOTMENT	
	a) Total area of land being subdivided	hectares/sq.m
	· · · · · · · · · · · · · · · · · · ·	to
	orsq.m tosq.m	
	c) No. of Lots proposed d) T	otal area of open spaceH/sq.m
Fo	rm Ref:RevisedversionofForm-SubdivisionApplication(1	113.doc
	st Revised: 2003-07-22	

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	Т	`he Application
То	ensure the accurate and efficient processing of this ap	oplication and to avoid delay, supply all the required information. Fill out
	sections completely, supply clear and concise answer	
1.	PROPERTY	
	· · ·	
	• • • •	
		(f) Topographic Sheet No
		(1) Topographic Sneet No
	i) Land Val. No	
2.	APPLICANT	
	LAND OWNER	AGENT
	LAND OWNER	ADEM
	Name	Name
	Mailing Address	Mailing Address
	Tel. No	Tel No
	E Mail Address	E Mail Address
	TRN	TRN
3.	SIZE ALLOTMENT	
	a) Total area of land being subdivided	hectares/sq.m
	b) Lot sizes range fromhectares	to hectares
	orsq.m tosq.m	
	c) No. of Lots proposed d) T	otal area of open spaceH/sq.m
P -	rn Dah Daviesdussein 10	112 Jan
	rm Ref:RevisedversionofForm-SubdivisionApplication(1 st Revised: 2003-07-22	
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Appendix 5

4. USE ALLOTMENT
a) Present Land use Agricultural Residential Commercial Industrial Institutional
Ruinate Farmstead Homestead Recreational Mixed Use Warehouse Other
(specify)
b) Proposed Land Use Agricultural Residential Commercial Industrial Institutional
🗋 Ruinate 🗋 Farmstead 🗋 Homestead 🔤 Recreational 🗐 Mixed Use 🗖 Warehouse 🗐 Other (specify)
c) Indicate Lot Nos. to be used for each of the above purposes
d) Number and use of buildings existing on the land
e) Covenants which may be breached by proposed subdivision
f) Land use on adjoining properties.
5. AMENITIES AND UTILITIES: (Place an 'x' in the appropriate box)
a) Electricity Supply: Public Private Not Available b) Domestic Water Supply: Perist Council Tank Private Tank Private Reservoir
b) Domestic Water Supply Parish Council Tank Private Tank Private Reservoir Public reservoir Well Other (Specify)
c) Irrigation Water: Available Not available d) Telephone: Available Not available
d) Telephone: Image: Image
f) Nearest Education Facilities in kmPrimarySecondaryHighTertiary
g) Nearest Health Facilities in kmHealth Centre
h) Distance from nearest Town or Village
i) Solid Waste Disposal 🛛 Yes If yes, what type
j) Proposed domestic water supplyk) Proposed waste water Treatment
6. STATEMENTS: (If necessary, use additional paper)
a) If lot sizes are below the minimum recommended, state reasons.
b) Describe any peculiar or unusual physical characteristics of the property that prevents it from yielding a reasonable return, if used as is or if it is improved. (See 6b of information section)
c) Any other relevant information to clarify proposals

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Appendix 5

V

	Signature: Owner/Agent
	Date
FOR THE USE	OF LOCAL AUTHORITIES ONLY
	Information Checked by
· · · · ·	is
	No Other Comments
Date transmitted to NEPA Date Retu	
	nd under Applications ONLY)
Decision of the Technical Committee (9 lots and un-	ler Application Only)
Date presented to the Building & Planning Committ	
	Date Local Authority received response from Applicant
Applicant Appeals to Minister Yes N	
Decision of Appeals Committee/Minister	
If Approved Date referred to Minister	
Confirmed Disallowed	by Minister (Place 'X' in appropriate box)
Date Common Seal of Council affixed on plan	Date advice sent to applicant
	aym ent In form ation
Receipt # Am ount \$	Received by

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Appendix 6

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