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Central Housing and Planning Authority & Environmental Protection Agency

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# 1.0 Glossary of Terms

**Abatement Measures** - mitigation measures or the way/means of lessening, reducing or alleviating pollution.

**Building Coverage** – means the total area occupied by a building at ground level excluding terraces, steps and ramps.

**Development** - means any building or rebuilding operations and any use of the land or any buildings thereon for the purpose which is different from the purpose for which the land or building was last being used.

**Building Height -** building height indicates the maximum elevation to which buildings will be permitted. This standard is usually expressed either in storeys or as a linear measure. The height is measured from the lowest level of the ground on which the building stands.

**Elevation** – a scale drawing showing the vertical projection of one side or façade of a building.

**Engineering Service Reserve** – a strip of land between two rows of lots that is used for the purpose of engineering services, for example, water supply, electricity infrastructure, storm water or effluent drainage. This reserve is typically 14 feet wide.

**Environmental Authorisation/ Permit** - means an environmental permit, a prescribed process license, a construction permit or an operation permit

**Permitted Use** – is a use which confirms to the provisions of a zoning plan.

**Planning Permission** – means permission to carry out development granted under the Town and Country Planning Act as a result of approval of an application by the Central Housing & Planning Authority.

**Prohibition** – a land use activity which under no circumstances is to be permitted in the zoned area.

**Setbacks** - the minimum distance which a building must be set back from property boundaries at ground and/ or upper floor levels and/ or eave lines. The building setback is the shortest distance perpendicular to the respective property boundary and the external surface of the building.

**Land Use** – any activity that takes place or is identified to take place on any portion of land or building.

**Use Class** – this specifies particular groups of uses that have similar functional characteristics and/or nuisance impacts and are generally compatible with each other.

# 2.0 Background

This Report principally sets out the general planning/zoning arrangement for the future development of Plots 'CB 1' to 'CB 64' as shown and defined on GLSC Plan number 41429 dated 2007-05-14 by M.S. Hutson, Sworn Land Surveyor (see Appendix 1). In this regard, it provides a framework for ensuring that commercial activities are appropriately sited and developed based upon good land use planning and environmental management principles. However, broader issues of future development with the area are also discussed in acknowledgement of the larger environmental context within which development will take place.

The location and physical attributes of the Lethem Commercial Zone certainly make it a highly favourable area for future commercial development. Additionally, it must be noted that Lethem's future as a commercial centre, both in terms of the regional and national context, is expected to be significantly re-shaped with the opening of the Guyana/Brazil Takutu River Bridge. Already, there are recognizable signs of increased commercial activity in Lethem and growing expressions of interest among members of the business community in possible land acquisition and development/investment for commercial use.

This scenario definitely points to the need to effectively manage the use and development of land in Lethem for future commercial development, particularly from the standpoint of securing orderly, harmonious and environmentally sound development. It is for these very reasons that the dedication of land for future commercial use and the zoning of such land is of critical importance.

# 3.0 The Approach

In recognition of the need to guide new commercial development in Lethem based upon an integrated assessment and understanding of cross-cutting issues, the approach adopted in the definition of this 'development guideline' took into account inter-agency review, local level stakeholder feedback through a multi-agency reconnaissance visit to the area (participatory site appraisal), as well as feedback from several focus-group meetings.

The key agencies involved in managing this process as an inter-agency mandate were:

- The Guyana Office for Investment;
- The Guyana Lands and Surveys Commission;
- The Environmental Protection Agency; and
- The Central Housing and Planning Authority.

The technical assessment of issues, including the definition of the zoning arrangement and appropriate development guidelines, was however the product of a collaborative effort involving the Environmental Protection Agency (EPA) and the Central Housing and Planning Authority (CH&PA). In this regard, the emphasis was on the integrated application of land use planning considerations and environmental management principles to inform the siting of activities vis-à-vis the commercial area and the future development of the area in general.

The prescribed zoning arrangement and related standards contained in this Report will however be subjected to a process of statutory approval by the CHPA in accordance with provisions of the Town and Country Planning Act, Chapter 20:01 Laws of Guyana. In this way, they will become legally enforceable.

# 4.0 The Policy Context

At the Regional level and within the context of a recently prepared Regional Land Use Plan for Region No. 9 (Guyana Lands and Surveys Commission), Lethem was identified as a major future development node with potential for increased settlement and related activities.

The local-level Lethern Development Plan (LDP) -2005-2010 (Central Housing and Planning Authority) emphasizes the need for new commercial development to take place within a context of land use compatibility. In this regard, it must be noted that the land use strategy approach of the LDP defined the area in which the new commercial sub-division is proposed as an area for adjacent compatible development.

Policy C.4.3 of the LDP also supports the principle that new commercial development must be based on quality site development standards, such as the provision of on-site parking and landscaping.

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# 5.0 The Existing Land Use Context

The defined commercial area is located on the fringe of what has been defined in the LDP as Lethem's 'Town Centre' and has a total area of approximately 45.54 acres (64 lots). The area is directly accessible by way of the major road bringing traffic into Lethem from Georgetown, with the site being east of and along this road. West of the site (over major road) is predominantly existing residential land use and a few commercial uses, including a hotel. To the southern end of the site is an area of land reserved for military purposes.

The site itself is currently largely vacant. However, a few land use activities are in existence and these are:

- Gas station;
- Bakery;
- Shopping mall;

<sup>&</sup>lt;sup>1</sup> Built up core commercial/administrative area of Lethem as defined in the Lethem Development Plan, CH&PA 2005-2010.

- Church; and
- Office of the Red Cross.

Currently under construction is an office building to house the Guyana Revenue Authority (GRA).

Two other contextual land use considerations relevant to the site are its proximity to the Lethem airstrip and the view of the Kanuku Mountains it allows.

From a futuristic perspective and given current land use attributes, the site is well positioned to benefit from a flow of traffic supportive of its intended commercial use.

# **6.0** General Zoning Considerations

Central to the determination of the proposed grouping ('zoning') of commercial land use activities on-site are the following considerations:

- Location and accessibility the site's location along a major road passing through
   Lethem and its high accessibility value given the prevailing population distribution in
   Lethem, as well as the area's potential to attract a transient population;
- Good public road frontage a large number of lots enjoy public road frontage and can potentially benefit from the existing wide road reserve;
- Topography the generally flat nature of the site and absence of depressions do not pose any serious limitations on the actual siting of any proposed commercial land uses;
- Land use compatibility considerations pertaining to the anticipated impact of one land use activity on the other; and
- Environmental management the spatial arrangement of land use so as to minimize any
  potential negative impact on the environment and preserve valuable environmental
  assets.

# 7.0 The Zoning Arrangement

## 7.1 Explanatory Note

There are two perspectives to zoning in the context of this report:

- a zoning arrangement that can be described as 'micro-level zoning' since the
  objective is to pro-actively group commercial land uses in a manner which is
  compatible and which allows for an efficient, harmonious and convenient
  spread of commercial use-types; and
- 'macro-level zoning', whereby the area or block of land in question is to be formally designated as an area in Lethem that is zoned for commercial purposes.

While both perspectives are applicable to this report, the focus is on the micro-level aspect. In this regard, it is essential to note that the defined commercial area does not in any way conflict with the land use policy recommendations contained in the LDP. Further and at the 'macro-level zoning, there has been inter-agency understanding on the suitability of the site for commercial use.

The zoning approach herein adopted is based on a two-fold arrangement. Firstly, broad use class groupings or 'zones' have been defined. Secondly, appropriate commercial use-types are specified for each 'zone' or use group.

Additionally, applicable development standards from the standpoint of planning, building operations and the environment in general are prescribed, but primarily as a guide or advisory to developers.

It is intended that the recommendations of this report, once approved by the Central Housing and Planning Authority, will be the basis for all decisions to be made for the approval of commercial development proposals in the area. This approval process will however recognize the need for specialized advice from other agencies whenever deemed necessary. Thus, for example, the EPA will be involved once the development proposal falls with the category for which an Environmental Authorization is required.

## 7.2 Use Class Groupings/Zones

The following broad use class groupings or 'zones' have been defined (see Appendix 2):

- 7.2.1 Class 'A' commercial major wholesale or retail commercial uses which are major traffic generators and which by their nature depend heavily on easy and direct access to through-traffic along a public road.
- **7.2.2** Class 'B' commercial commercial uses (wholesale or retail) which do not necessarily depend on the advantages of public road frontage but which can be appropriately located at corner lots.
- **7.2.3** Class 'C' commercial service-type commercial/recreational uses which are not involved in major wholesale or retail transactions but which provide public service of a commercial/recreational nature.
- **7.2.4** Class 'D' commercial commercial uses which may related to those of Class 'A' and which may be of large scale but not notably reliant on easy access by high volume traffic.

## 7.3 Development within Zones or Use Groups

## 7.3.1 Class 'A' Commercial

Within this use class, the following are deemed **permitted uses**:

- Service/Gas Stations:
- Motor vehicle servicing and repair;
- Food Restaurants;
- Supermarkets;
- Shopping Malls;
- Showrooms; and
- Major wholesale and retail outlets, such as hardware stores, furniture stores and stores for the sale of home appliances.

**Other Development**: Such other development as from time to time may be deemed appropriate by the CH&PA.

**Prohibitions**: No undertaking of an industrial nature or that providing any public transport terminal facilities shall be permitted.

**Existing Development**: Existing development within this 'zone' shall be allowed to continue operations on condition that they satisfy the requirements of the competent authorities.

**New Development**: All new development within this 'zone' must conform to specified planning, building and environmental standards, as defined under **8.0**. It is recommended that all new service/gas stations be grouped in the area north of the central access road and south of the existing gas station (the CB 10 to CB 17 area).

## 7.3.2 Class 'B' Commercial

Within this use class, the following are deemed **permitted uses**:

- Pharmacies;
- Liquor restaurants/bars;
- Food restaurants:
- Stationery stores;
- Grocery shops;
- Internet cafes;
- Boutiques;
- Snackettes; and
- Outlets for the bottling and sale of water.

**Other Development:** Such other development as from time to time may **be** deemed appropriate by the CH&PA.

**Prohibitions:** No undertaking of an industrial nature or that providing any public transport terminal facilities shall be permitted. Additionally, no Class 'A' commercial activity is permitted within this 'zone', except under exceptional circumstances.

**Existing Development**: Existing development within this 'zone' shall be allowed to continue operations on condition that they satisfy the requirements of the competent authorities.

**New Development**: All new development within this 'zone' must conform to specified planning, building and environmental standards, as defined under **8.0**. Consideration will be given to the facilitation of a combination of one or more commercial use-type on a given plot.

#### 7.3.3 Class 'C' Commercial

Within this use class, commercial/recreational type land uses shall be considered **permitted uses**. These shall include the following:

- Public entertainment establishments, such as sports bars, night clubs and gaming facilities for indoor games;
- Lodging facilities, such as hotels, guest houses and residential apartment buildings;
- Internet cafes and call centres;
- Gymnasiums;
- Cultural centre;
- Professional offices offering (for example) medical or financial services; and
- Hairdressing salons and barber shops.

**Other Development:** Such other development as may be from time to time be deemed appropriate by the CHPA.

**Prohibitions:** No activity of an industrial or heavy commercial nature shall be permitted.

**New Development:** All new development must conform to planning, building and environmental standards, as specified under section **8.0.** 

## 7.3.4 Class 'D' Commercial

Within this use class, the following are deemed **permitted uses:** 

- Commercial storage;
- Repair and sale of motor vehicles and spare parts;
- Wholesale and retail facilities for bulky products such as paint, agricultural machinery and building materials; and
- Meat shops.

**Other Development:** Such other development as from time to time may be deemed appropriate by the CH&PA.

**Prohibitions:** No activity of a large-scale industrial nature shall be allowed.

**Existing Development:** Existing development within this 'zone' shall be allowed to continue on condition that they satisfy the requirements of the competent authorities.

**New Development**: All new development within this 'zone' must conform to specified planning, building and environmental standards, as defined under section **8.0**.

## **NOTES:**

- 1. In the defined commercial block, mix-use arrangements shall be permitted to allow for residential use on the upper floor of commercial buildings. This arrangement is intended to foster liveliness and a strong sense of community in the area, while allowing business owners a better opportunity to manage business operations from a security perspective.
- 2. The use of any plot within the commercial area for the purpose of a public transport terminal was not considered because of the following reasons:
  - (a) The site is not considered one which is appropriately and strategically positioned in terms of the movement of traffic into and out of Lethem, particularly given the presence of the Takutu River Bridge.

- (b) A public transport terminal in the area raises the issue of potential land use conflicts, since a terminal function usually attracts a whole range of other activities. In this regard, the resulting scale of terminal operations may be problematic in the existing context and particularly since commercial activities are in themselves major generators of traffic.
- (c) Because Lethem performs vital functions as a border settlement and with linkage to the city of Georgetown, the demands for large capacity, long-haul public transport modes are likely to increase significantly in the future. This implies the need for separately dedicated land for terminal purposes since the area in question was not designed with this scenario in mind.

# 8.0 Applicable Development Standards

The intent of this zoning proposal this area is to permit the establishment of an organized set of commercial activities, which will provide goods and services for the people of Lethem (both the resident and transient population). The standards contained in this section are intended to minimize any adverse effect of activities within the commercial zone on nearby properties and ensure a safe, efficient and convenient land use arrangement.

## 8.1 Planning and Building Standards

## Minimum Required Set-backs

Front and rear - all buildings shall be set-back not less than 15ft (15' - 0") from the front and 10ft (10' - 0") from the rear of the boundary of the lot.

Side set-back: all buildings shall be set back not less than 10ft (10' - 0") from the side boundaries of the lot.

## **Building Height**

Minimum – one storey

Maximum – none; except as required by the Guyana Civil Aviation Authority and as allowed by the CH&PA.

## Building coverage

The aggregate of all buildings shall not exceed 66.67% of the entire lot.

## **Parking**

The general rule is that on-site parking must be provided for all development in the area. Additionally, provision must be made for vehicular circulation to allow for on-site loading and off-loading. While opportunities for roadside parking may exist, proprietors should not depend solely on this to cater for their commercial parking needs.

All parking facilities shall be designed in accordance with the following standards:

Restaurants – 1 space for each 4.65 sq. m (50 sq. ft) of public dining

Hotels – 1 space for each 4 guest bedrooms

Apartment buildings -1 space per 2 units

Gas stations — 1 space for each 27.9 sq. m (300 sq. ft) of gross floor area

Offices – 1 space for each 92.9 sq. m (1,000 sq. ft) gross floor area

Retail stores – 1 space for up to 185.8 sq. m (2,000 sq. ft) of gross floor area,

plus 1 extra space for each additional 46.45 sq. m (500 sq. ft).

## **NOTE:** 1 parking space - 4.88m x 2.44m (16ft x 8ft)

## Landscaping

Landscaping is required to fulfill several objectives, which include:

- 1. To provide shade and a general cooling affect.
- 2. To improve air quality.
- 3. To reduce noise within and around the commercial area.
- 4. To 'soften' and improve the appearance of the area.

It is required therefore that all lots be appropriately landscaped in locations which are:

- Clearly visible from the street;
- Allow for enjoyment by the customers of the business, and or the general public; and
- Not in conflict with any utility poles, overhead cables or underground utility infrastructure.

## Aesthetics

Where possible commercial property owners are encouraged to:

- Use external finishes and materials that are muted and non-reflective; and
- Use existing or similar design elements that contribute to the character of the area.

## Signage

No signage must be placed in such a manner so as to obscure the vision of drivers entering or leaving the commercial zone.

The use of signs which have flashing or intermittent illumination should be avoided.

## Height of fence/ walls around the site

The maximum height of fences shall be no more than 6 ft.

## The Engineering Service Reserve between two rows of plots.

The 14'- 0" Engineering Service Reserve between the first and second row of lots must be kept clear at all times of any encumbrance and shall be maintained and used only for the purpose of drainage and the placement of any necessary utility infrastructure, such as poles or cables.

# 8.2 Requirements for Full Planning Application – Building Works

- Applications for full planning permission must be made through the respective Local Authority, in this case the Ireng/ Sawarinau Neighbourhood Democratic Council.
- 2. Applicants must submit the following documentation when submitting full application for building operations:
  - I. The completed building application form which is collected from the Local Authority.
  - II. Three (3) copies of building plans including a plan of the site, floor plans and two elevations (1 front and 1 side). These drawings should clearly show the following:
    - The external dimensions of existing and/ or proposed buildings.
    - The precise location of all existing buildings, including the identification of buildings to be demolished or any additions to be made.
    - The existing and proposed building setback distances.
    - A detailed site location sketch/ plan of the land to which the application relates, giving sufficient detail to enable the site to be positively identified in the field.
    - Legal evidence showing proof of ownership.

- Any additional information, which may be required by the Authority to make a proper determination on the application.
- 3. The Local Authority collects the processing fees for the application, processes the application and refers it to CHPA with recommendation(s).
- 4. All proposals for building works within the commercial area must include the following additional information:
  - I. Site drainage details.
  - II. Details in relation to proposed water supply and sewage disposal system.
  - III. A parking and circulation proposal.
  - IV. The location of loading and unloading facilities.
  - V. Provision for solid waste collection and disposal.

A developer may be requested to provide additional information as may be required by any competent agency, such as the EPA or the Guyana Fire Service.

## 5. Application for development

No building, structure or land shall be used and no building or structure shall be erected, enlarged or established for any commercial development unless approved by the CH&PA based upon the recommendation (s) of other relevant agencies, when the application so merits.

Due to the proximity of the Lethem Airstrip to the site, some building development proposals may require statements of 'no-objection' from the Guyana Civil Aviation Authority.

## **8.3** Environmental Standards

In the construction and operation phases of the commercial site, pollution emission and traffic disturbance can cause public nuisances and can affect the health of employees, the general public and environment at large. In this regard, appropriate pollution management and abatement measures should be implemented. These include:

## Noise, Dust and Traffic Management

- Ensure that there is good site layout. Noise producing equipment should be appropriately sited to prevent and/or control adverse noise impacts.
- The use of silencers/mufflers/dampers on generators, pumps and other noise producing equipment should be encouraged. Additionally, generators and other 'heavy' sound producing equipment should be mounted on suitable bases, to dampen sound waves and vibration.
- Facilities with noise producing equipment should have adequate soundproofing enclosures. Facilities must also comply with the Guyana National Bureau of Standards (GNBS) Interim Standard for Noise Emission into the Environment.
- Dust suppression methods such as water soaking of material stock piles should be considered by occupants/ managers of the commercial property.
- Asphalting of unpaved roads within the commercial property and the Lethem
   Main Road contiguous to the commercial property is highly recommended for
   the prevention and control of dust pollution.
- Establishing and maintaining vegetative buffer strips along the perimeters of each individual plot within the commercial property will also assist with mitigating dust and noise impacts on the receiving environment.
- Adequate parking facilities should be provided within the commercial property.
   Additionally, parking facilities should be established within the compounds of commercial plots allocated.

## **Wastewater Management**

- Direct discharge of laundry and liquid effluent and/or domestic waste water to the receiving environment should be prohibited. Effluent discharge and surface runoff from all facilities must undergo prior treatment before discharge into the receiving environment. Effluents and surface runoff should be directed to a pretreatment system such as a sand and charcoal soak-away system before discharge.
- Septic tanks must be built in accordance with the GNBS Code of Practice for the Design and Construction of Septic Tanks and Associated Secondary Treatment and Disposal System.
- Interceptor/grease traps for solids and grease should be installed in drains, especially drains leading from the kitchen area.
- An interceptor drain should be installed at a suitable location and adequately sloped to collect storm flow from the facility. For entities producing petroleum waste (waste oil, spilt fuel, etc, e.g. gas stations, wash bays, service stations, etc), an oil/water separator should be installed at a suitable location along the inceptor drain intercept runoff before discharge into the receiving environment. Recovered oil must be labeled stored and disposed of in a manner approved by the EPA.

## **Solid Waste Management**

- Proper solid waste management and disposal practices such as recycling and reuse of waste should be practised.
- Developers should be encouraged to sort waste at the point of generation, so that reusable items, plastics, hazardous wastes, recyclable material and biodegradable materials can be separated.
- Hazardous wastes such as waste oils, and paint/petroleum containers should be clearly labeled and stored in a secured location in an imperious bund able to contain spills from the largest storage container.
- Garbage should be properly stored on site, in adequate garbage receptacles, until
  collection for disposal at an approved landfill site.

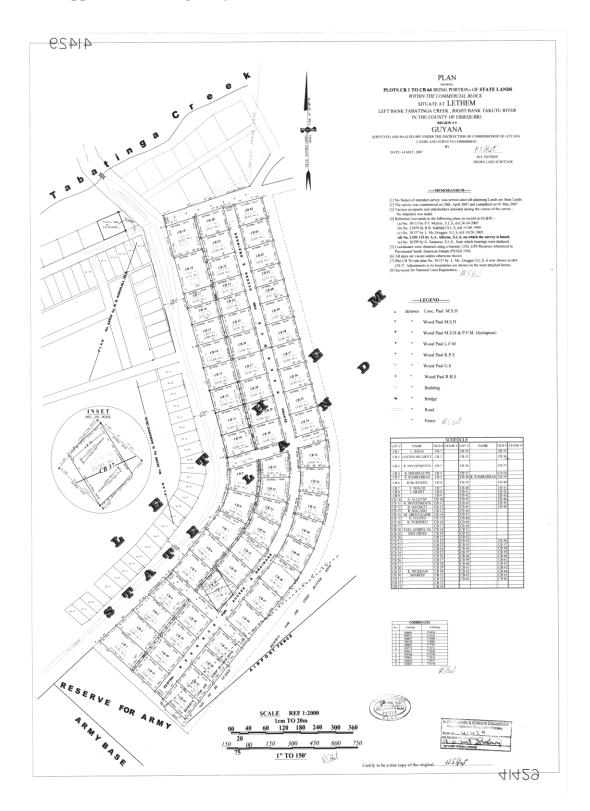
## 8.4 Procedure for Applying and Obtaining Environmental Authorization

The developer of any project that may significantly affect the environment (see appendices for list) must complete and submit to the EPA an application form for Environmental Authorisation. The following is a list of information/documentation that must be submitted with the completed application form.

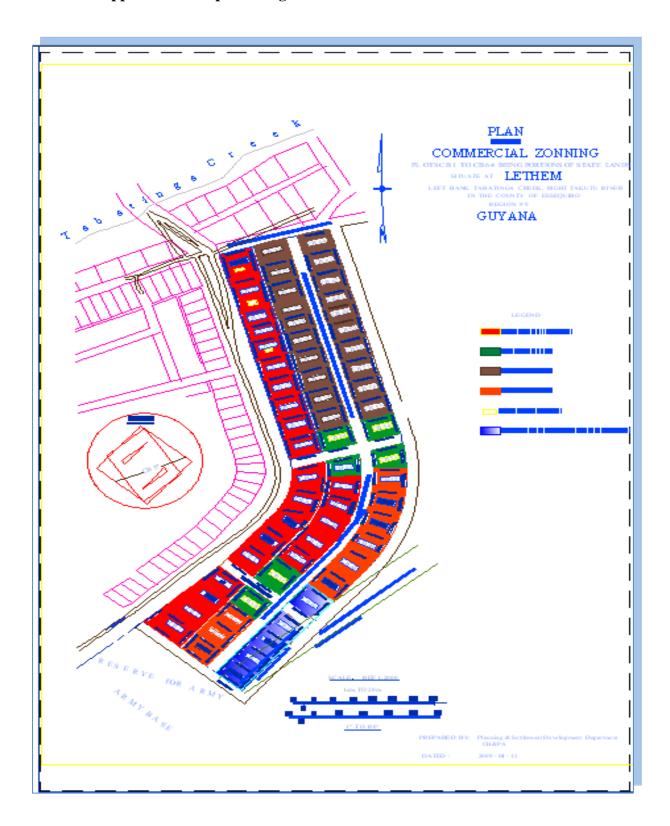
- 1. An application fee of US \$50.00 or the Guyana equivalent using the Scotia Bank daily exchange rate.
- 2. Proof of land ownership Transport, Title to Land or Lease.
- 3. Planning Permission from the CH&PA.
- 4. No-Objection Letter from the Local Authority (NDC).
- 5. Site Map / Plan showing layout of the operation and surrounding land uses.
- 6. A Certificate of Incorporation (if investor is a company) issued by the Registrar of Companies or a Business Registration (if a business name is used).
- 7. Form of Identification: National ID card, Driver's Licence, Passport, etc.

# 9.0 Appendices

# 9.1 Appendix 1 – Design Layout for Commercial Zone



# 9.2 Appendix 2 - Map Showing Broad Land Use Zones



## 9.3 Appendix 3 – Entities/ Projects Requiring Environmental Authorisation

Projects proposed to be established at the commercial site that will require Environmental Authorisation are as follows:

- 1. Hotels, Guest-houses or Inns above ten (10) rooms.
- 2. Motor Vehicle Service and Repair Stations
- 3. Wash Bays
- 4. Gas Stations
- 5. Laundry Facilities
- 6. Water Treatment Facilities

Notwithstanding the above, the following projects would also require Environmental Authorisation before development works begin.

## **Infrastructure**

- 1. Port and harbour development
- 2. Construction and operation of housing estates
- 3. Construction of roads and highways
- 4. Construction of bridges
- 5. Development of industrial complexes/estates
- 6. Airport expansion and/or development
- 7. Development of hospitals
- 8. Development of water distribution facilities and pipeline systems

## **Service Industries**

- 1. Cremation facilities
- 2. Funeral parlours
- 3. Abattoirs/slaughter houses
- 4. Water management projects (dams, reservoirs/impoundments)
- 5. Power generation plants (including the use of fuels such as biomass and other renewable sources)
- 6. Hydropower development
- 7. Establishment of parks, nature trails and recreational facilities
- 8. Auto electrical/mechanical workshops

- 9. Vulcanizing shops
- 10. Body-work/spray painting operation

## **Processing plants**

- 1. Pulp and paper processing plants
- 2. Food processing plants (including meat, fish/seafood and fruits)
- 3. Distilleries, breweries and beverage manufacture
- 4. Oil processing plants
- 5. Textile mills
- 6. Petroleum processing/petrochemical plants
- 7. Cement production/bagging plants
- 8. Paint and Ink manufacturing
- 9. Pharmaceuticals manufacture
- 10. Asphalt/bitumen plants
- 11. Tanneries
- 12. Metal processing
- 13. Chemical processing/manufacturing plants
- 14. Poultry Processing
- 15. Milk based industries
- 16. Goldsmiths

## Mining/Mineral Processing

- 1. Mining (sand, bauxite, loam, gold, diamond, rock)
- 2. Metal and mineral processing

## **Agriculture**

- 1. Sugar manufacture and refining
- 2. Rice processing plants
- 3. Agricultural developments
- 4. Livestock husbandry and production (>500 heads of poultry, >50 heads of swine)
- 5. Mariculture/aquaculture facilities

## **Wood Processing**

- 1. Logging
- 2. Plywood manufacture

- 3. Sawmill and wood processing
- 4. Furniture manufacturing

# Waste Handling

- 1. Facilities which store, treat and/or dispose of wastes (including hazardous, domestic, agricultural, industrial, commercial wastes)
- 2. Recycling facilities
- 3. Landfill sites
- 4. Incinerators

## <u>Other</u>

- 1. Dredging activities
- 2. The release, use or keeping of genetically modified organisms
- 3. Any other project that may have a significant impact on the environment

## 9.4 Appendix 4 – Personnel Credits

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