

Appendix II
Terms of Reference for EIA
Submitted to NEPA (after incorporating comments)
In letter dated November 27, 2008
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TERMS OF REFERENCE

FLORENCE HALL

HOUSING DEVELOPMENT

TRELAWNY

HUMAN HABITATION PROJECTS

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Gore Developments Ltd. propose to construct over 800 housing solutions on property at Florence Hall in Trelawny. Following an Inquiry Letter to the National Environment and Planning Agency (NEPA), and subsequent meetings and discussions, NEPA informed Gore Developments Ltd. that an EIA would be required for the proposed development and requested the submission of Draft Specific Terms of Reference for conducting the EIA.

These Draft Specific Terms of Reference TOR's have been modified from the NEPA generic TOR's for the development and construction of **Human Habitation Projects** including sub-divisions and housing developments, hotels and resorts, prison/correctional facilities, office buildings and shopping centres. These TOR's outline the aspects of an Environmental Impact Assessment (EIA), which when thoroughly addressed, will provide a comprehensive evaluation of the site, description of the project, predicted environmental impacts, needed mitigation measures, potentially viable alternatives to the development proposed and all related legislation.

The Environmental Impact Assessment (EIA) is site specific and project specific, and the generic TOR's have been modified to be specific to the project, Florence Hall Housing Development, at the lands identified in Florence Hall, Trelawny.

Terms of Reference

The Environmental Impact Assessment for the Florence Hall Housing Development will:

- 1) Provide a complete description of the existing site proposed for development. Identify the major environmental issues of concern through the presentation of baseline data which will include physical, biological, social and heritage considerations.
- 2) Detail the elements of the development, highlighting areas to be reserved for construction and the areas which are to be preserved in their existing state, green areas and layout of project.
- 3) Outline the Legislation and Regulations relevant to the project at both the national, regional, and international levels as appropriate.
- 4) Predict the likely potential impacts of the development on the described environment, including direct, indirect, reversible, irreversible and cumulative impacts, and indicate their relative importance to the design of the development's facilities.
- 5) Identify mitigation action to be taken to minimise adverse impacts and quantify associated costs.
- 6) Include an outline Monitoring Plan which will ensure that the mitigation measures are adhered to.
- 7) Describe the alternatives to the project that could be considered at that site.
- 8) Assess public perception of the proposed development through review of existing information for projects in the area as well as interviews with stakeholders.

The following tasks will be undertaken in fulfilment of the Terms of Reference:

Task #1. Description of the Project

A comprehensive description of the project, noting areas to be reserved for construction, areas to be preserved in their existing state as well as activities and features which will introduce risks or generate impact (negative and positive) on the environment. This will include the use of maps, site plans, photographs, and other graphic aids and images, as appropriate, and include information on location, general layout and size, as well as pre-construction (e.g. topographical surveys, Google Earth ® images and photographs), construction (e.g. location of batching plant, diesel storage, construction time table and phasing), and post construction plans (subdivision plan including layout and architects impression of house). The project will be implemented on a phased basis and all phases will be clearly defined, the relevant time schedules provided and phase maps included.

Task #2. Description of the Environment

This task involves the generation of baseline data which is used to describe the study area as follows:

- i) physical environment
- ii) biological environment
- iii) socio-economic and cultural constraints.

The methodologies employed to obtain baseline and other data will be clearly detailed and references given as appropriate. The extent and quality of the available data will be characterized, explaining significant information deficiencies and any uncertainties associated with the predictions of impacts.

Baseline data should include:

(A) Physical

- i) A detailed description of the existing **geology** and **hydrology** will be given. Special emphasis will be placed on Karst features (caves, depressions and sinkholes), storm water run-off, drainage patterns, slope stability, effect on groundwater and availability of potable water.
- ii) **Water quality** of the existing well, (if accessible), the pond, the sinkholes and the historical data on coastal waters in the vicinity of the development will be presented. Quality Indicators will include but not necessarily be limited to nitrates, phosphates, faecal coliform, and suspended solids. Information will be presented on the water quality of the nearby Glistening Waters Lagoon.
- iii) Climatic conditions and air quality in the area of influence including particulate emissions from stationary or mobile sources, NO_x, SO_x, wind speed and direction, precipitation, relative humidity and ambient temperatures.
- iv) Noise levels at selected locations on the undeveloped site and the ambient noise in the area of influence.
- v) Obvious sources of existing pollution and extent of contamination.
- vii) Availability of solid waste management facilities.

(B) Biological

A detailed description of the terrestrial flora and fauna and habitats will be provided for this dry limestone wooded area with Karstic features. Information on rare, endemic, protected or endangered species will be provided. Migratory species will also be considered. Generally, species dependence, niche specificity, community structure and diversity will be

considered as well as a DAFOR rank for each species. The sensitivity of the biological components of the Glistening Waters Lagoon will also be described.

(C) Socio-economic & cultural

Present and projected population; present and proposed land use; planned development activities, issues relating to squatting and relocation, community structure, employment, distribution of income, goods and services; recreation; public health and safety; cultural peculiarities, aspirations and attitudes should be explored. The historical importance of the area should also be examined. While this analysis is being conducted, an assessment of public perception of the proposed development will be conducted. This assessment may vary with community structure and may take multiple forms such as individual meetings, application of interview instruments, as well as the final requisite, public presentation of the findings of the EIA. Heritage and cultural aspects will be investigated and will include information on the Florence Hall Great House and any significant features of the caves on the site.

Task #3 - Legislative and Regulatory Considerations

The pertinent regulations and standards governing environmental quality, safety and health, protection of sensitive areas, protection of endangered species, siting and land use control at the national and international levels will be given. The examination of the legislation will include at minimum, legislation such as the NRCA Act, the Housing Act, the Town and Country Planning Act, Building Codes and Standards, Development Orders and Plans and the appropriate international convention/protocol/treaty where applicable.

Task #4 - Identification of Potential Impacts

Potential impacts will be identified as they relate to, the following:

- modification of karst features

- change in drainage pattern
- flooding potential
- landscape impacts of excavation and construction
- loss of natural features, habitats and species
- pollution of potable, coastal, surface and ground water
- air and noise pollution
- capacity and design parameters of proposed sewage treatment facility.
- socio-economic and cultural impacts
- risk assessment
- solid waste management
- the carrying capacity of the proposed site

Impacts will be identified as significant positive or negative impacts, direct and indirect, long term and immediate impacts, reversible and irreversible. Project activities and impacts will be represented in matrix form. Impacts will be identified as appropriate, for the site preparation, construction and operation phases. Cumulative impacts will also be identified.

Task #5 Mitigation

Mitigation measures will be presented, as far as possible, for any potential adverse impacts due to the proposed development. Recommendations for utilising the existing environmental attributes for optimum development will also be given particularly with respect to green areas, drainage issues and heritage museums. Mitigation measures will be costed as appropriate.

Task #6 - Monitoring

An outline Monitoring Plan will be prepared to monitor implementation of mitigation measures and project impacts during construction and operation phases.

The outline Monitoring Plan will include:

- Introduction outlining the need for a monitoring programme and the relevant specific provisions of the permit license(s) granted.
- The activity being monitored and the parameters chosen to effectively carry out the exercise.
- The methodology to be employed and the frequency of monitoring.
- The sites being monitored. These may in instances, be pre-determined by the local authority and should incorporate a control site where no impact from the development is expected.
- Frequency of reporting to NEPA

Requirements of the Monitoring Report will also be given and include, at a minimum:

- Raw data collected. Tables and graphs to be used where appropriate
- Discussion of results with respect to the development in progress, highlighting any parameter(s) which exceeds the expected standard(s).
- Recommendations
- Appendices of data and photographs if necessary.

Task #7 - Project Alternatives

Alternatives to the project will be presented including the No-Action Alternative. This examination of project alternatives will incorporate the use history of the overall area in which the site is located and previous uses of the site itself.

Reporting

All Findings will be presented in an **EIA report** and will reflect the headings in the body of the TOR's. Ten hard copies and an electronic copy of the report will be submitted to NEPA and copies prepared for the Parish Library and Parish Council offices to facilitate Public Reading. The report will include baseline data, references, plans, maps, and photographs, as well as appendices items such as plans, the study team, and supporting reports and documents.

The electronic copy will facilitate posting on NEPA's website to allow circulation to sister agencies and stakeholders for review.