



Kigali, 12 SEP 2024

**REQUEST FOR EXPRESSIONS OF INTEREST
(CONSULTING SERVICES – FIRMS SELECTION)**

Title of the Assignment: Consulting Services to Carryout Feasibility Study for Reg Control Center and Communication Building.

Ref No: 001/C/2024-2025/OCBI/TSRLMC-ADF

The Government of Rwanda has *received* financing from the *African Development Fund hereinafter* called the **Bank** toward the cost of the Transmission System Reinforcement and Last Mile Connectivity Project and intends to apply part of the proceeds toward payments under the Contract for *Consultancy Services to carrying out Feasibility Study for REG Control Centre and Communication Building.*

The services included under this project are to carry out Feasibility Study for REG Control Centre and Communication Building in collaboration with Rwanda Energy Group (REG). Specific tasks that will be performed and completed over a contract period of not more than seven months will include:

- a. Preparation of a detailed architectural and engineering designs for the construction of a main and back-up National Electricity Control Center buildings as well as a high-rise communication building and preparation of tender documents for the recruitment of an EPC Contractor.
- b. Undertaking of an environmental and social impact assessment including the acquisition of the and associated permits for the construction of the control center and communication buildings
- c. Detailed review of the existing SCADA/EMS/DMS systems and the development of a comprehensive scope of work and plan schedule, and other engineering requirements for the relocation of the existing SCADA/EMS/DMS systems and hardware to the new control centers (both main and backup)

The Energy Development Corporation Limited (EDCL) now invites eligible consultants to indicate their interest in providing these services. Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may constitute joint ventures to enhance their chances of qualification.

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the African Development Bank's *Procurement Policy for Bank Group Funded Operations Approved in October 2015*, which is available on the Bank's website at <http://www.afdb.org>.



The Consultant will be selected in accordance with the **Quality and Cost-Based Selection (QCBS)** method set out in the Procurement Regulations.

The detailed Terms of Reference (TORs) for the assignment can be found at the following website: www.reg.rw.

Interested consultants may obtain further information at the address below during office hours from 09:00 AM to 5:00 PM, Kigali time.

Expressions of interest must be delivered by email to the address below not later than 08./10./2024 at 5:00 PM local time and mention "CONSULTING SERVICES TO CARRY OUT FEASIBILITY STUDY FOR REG CONTROL CENTER AND COMMUNICATION BUILDING".

Address:

Energy Development Corporation Limited (EDCL)

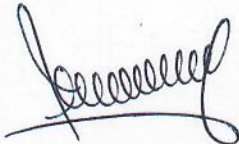
Managing Director

KN 2 ST, Procurement Unit, 2nd Floor KCT

P.O. Box 3855 Kigali, Rwanda, tel: + (250) (0) 787172265

Email: procurement@edcl.reg.rw

Sincerely,

 **gentile
umushashi**

Gentile UMUSHASHI

Head of Procurement Management Services



Félix GAKUBA

Managing Director

TERMS OF REFERENCE FOR RECRUITMENT OF A CONSULTANCY FIRM TO CARRYOUT FEASIBILITY STUDY FOR REG NATIONAL ELECTRICITY CONTROL CENTER AND COMMUNICATION BUILDING

1. PROJECT DESCRIPTION

Rwanda Energy Group (REG) through its subsidiaries Energy Utility Corporation Limited (EUCL) and Energy Development Corporation Limited (EDCL) develops, constructs, manages, operates and maintains the generation, transmission and distribution network of the Rwanda Electric Network. The Rwandan transmission network comprises of 110kV and 220kV voltage levels with regional interconnections. The distribution network comprises 30kV and 15kV voltage levels.

REG has an old building serving as Electricity Network Control Center and wants to construct a new state of art National Electricity Control Center (main NECC) that will comprise both Electricity Transmission Control room and Electricity Distribution Control room to accommodate SCADA/EMS/DMS systems and hardware. REG also wants to construct a backup Control Center (as the mirror of the main control center) at a different location. The Main NECC will be constructed close to the existing National Control Center (on the same plot at Gikondo, Kicukiro District). The existing SCADA/EMS/DMS systems and hardware would be relocated into the newly constructed main and back-up Control Centers.

REG lacks a centralized and innovative communication system and wants also to construct that communication facility. The Communication building will be constructed on a new plot located at Muhima Sector, Nyarugenge District and Kigali City. (UPI: 1/01/06/07/108 and UPI: 1/01/06/07/121)

2. OBJECTIVES

The consultancy firm will support EDCL in developing the design and technical documentation (architectural, structural and building services drawings, design calculations, technical specifications, Bill of Quantities including cost estimates and construction time schedules) for Main and Back-up NECC and Communication Buildings. The specific task to be performed by the Consultant includes:

- ✓ Conducting detailed assessment of the existing SCADA/EMS/DMS systems
- ✓ Preparation of a detailed architectural and engineering design for the construction of the main and back-up National Electricity Control Center buildings as well as a Communication building and preparation of tender documents for the recruitment of an EPC Contractor .

- ✓ Develop a comprehensive scope of work and plan schedule and other engineering requirements for the relocation of the existing SCADA/EMS/DMS systems and hardware to the new control centers (both main and backup).
- ✓ Undertake an Environmental and Social impact assessment including the acquisition of the necessarily permits for the construction of the control center and communication buildings.

3. SCOPE OF SERVICES AND REQUIREMENTS

The Consultant firm is expected to conduct a detailed feasibility study that will enable the best economic use of available land and ensure that the design addresses functions of both REG control Center and Communication Building. The firm is also expected to assess the existing SCADA/EMS/DMS systems and prepare a comprehensive scope of works for their relocation to the newly constructed buildings when completed.

3.1. REG Communication Building:

The scope of services will include the development of designs and technical documentation for a high-rise building (class: G + ≥ 10 + 2B) to accommodate Data center, IT workshops, IT training rooms, Offices, meeting rooms, hardware, software and associated communication facilities and enough parking including the following elements and structures:

1. Boundary walls and fence
2. Entry and exit security points
3. Car parking areas (both on ground and in the basement).
4. Data center to host servers and racks
5. IT workshop (IT equipment repair and maintenance)
6. IT Training room for IT and Systems training
7. Electrical room to host electrical power supply system and UPS
8. Network room hosting communication network devices/equipment and fiber optic equipment/facilities
9. Staff offices
10. Meeting rooms
11. Firefighting system
12. MEP (Mechanical, Electrical and Plumbing) works
13. Landscaping

3.1.1. Requirements

- A. Data Center

The planned datacenter shall be constructed with energy saving features, sustainable materials, and other environmental efficiencies in mind. In other words, it shall be a green datacenter.

i.Connectivity

The datacenter shall be a carrier neutral facility with access to multiple fiber providers and diverse paths for fiber access.

ii.Cabling

- Both electricity and Data cables must pass through underground trays and sometimes ceiling trails.
- Data cable may pass through ceiling and power cable pass under raised floor. It is better they do not cross pass each other.
- Each rack should have its own switch for better cable management
- Each rack would be better it relates to two sources of power for redundancy, easy maintenance with minimum service downtime.

iii. Uninterruptible Power Supply

- The datacenter shall be powered by an efficient and reliable supply taking into consideration the equipment installed into the room.
- Utility supply (grid) and standby generator shall be considered
- Two independent and separate electrical power supplies into the servers' room, to allow the connection of servers with two different power supplies, then a cutoff of one supply should not lead to a general interruption of the services.

iv.Security, Access (Physical access, Logical access)

- The fundamental demands for security controls to a data center are to ensure the main objectives of IT security, namely confidentiality, availability, and integrity.
- The degree of security concern and the response vary greatly, but in general datacenter rooms are left locked with access provided through biometrics, keypad, or card-swipe. Ideally, there is a log of who entered and when. Often closed-circuit cameras monitor the room.
- Doors shall be metallic and locked manually and electronically as described above.
- Entrance recorded: Access to the datacenter rooms should be recorded and reviewed, so that it not only prevents unauthorized access but also detects unauthorized access or access attempts.
- The surroundings of the datacenter shall be protected, and the building made from concrete blocks.

- There shall be a reinforce security measures; CCTV, Microwave, Motion Detectors (200+), Bollards, Security Booths at Entrances
- Physical security: Administrative controls and Physical/Technical controls.
- Administrative control: Facility construction; the datacenter is ideally planned and designed with the blueprint of a building.
- They can be fully mounted with access control, air conditioner, fire extinguisher, UPS, raised floors and suspended ceilings.

v. Fire protection, detection and suppression

The room shall be equipped with Water/Smoke Detection and associated Alarm Panel for water Detection (Even a single drop) and Alarm Panel for smoke Detection. These shall meet the standard of datacenter environment control.

vi. Environmental control

An environmental monitoring system (EMS) is often used in facilities of this type to regulate temperature, humidity, and power supply, and even to detect water leaks from pipes or ceiling. EMS can also monitor the status of UPS, batteries, and cooling systems. This capability can typically be incorporated via the UPS interface and can be available on web browser so that it is accessible from any location.

- **Air Conditioning:**

Larger server rooms with more racks, arranged in rows might be better served by a floor-mounted system. 'Down flow' units may be more appropriate in spaces where increased cooling loads and air distribution are needed. To accommodate floor cooling, a raised floor shall be installed in the room, with the air-conditioning (precision air conditioning) subsequently distributed through the floor void.

Redundant systems may need to be available in case one should fail or need maintenance.

- **Ceiling**

Extensive project experience has shown that built or false ceilings are generally unsuitable features for server rooms. Mostly this is due to the overhead space requirements for an air conditioning return air path and down flow unit. Incorporating ceilings will only complicate the already limited Headroom available, but for some hub rooms and smaller server rooms they are occasionally left in place.

To prevent this, the ceiling inside the server room is made in a thin layer of aluminum and the clearance between cable trays and ceiling must be considerable at least a minimum of 0.9m to 1m.

- **Flooring & raised floors**

The cables and cooling apparatus required for a server room or data center often makes raised flooring a ‘must’ for these facilities. Access is much easier with a raised floor.

Raised flooring usually comprises of panels finished with a high-pressure laminate material and installed atop pedestals (long thin columns which supports a statue, or a tall column-like structure on which something rests), allowing for easy removal for access to the space below.

Raised floor components may also need to be grounded. Whether raised or not, flooring materials need to be antistatic to prevent sparks from occurring. Fire suppression for floors raised over a certain height may also be required by code. Raised floors can also raise additional design questions, such as whether ramps will be required for the movement of equipment in and out of the room.

A removable ramp shall be considered.

- **wire server cages partition panel**

Inside the server room, rows of rack shall be separated by wire mesh

vii. Monitoring room

There shall be monitoring systems for each piece of equipment in the datacenter and its affiliated rooms. These include a monitoring system for the UPS and power systems, a monitoring system for network devices & servers and network flows, a monitoring system for camera and security access and a monitoring system for SCADA.

The output of the monitoring systems shall be on large screen display wall mounted.

3.2. National Electricity Control Center

The scope of services will include the development of designs and technical documentation for a modern and functional buildings (main and backup site) to host the Transmission Control Systems(TCS) and Distribution Control Systems (DCS) control rooms. Two options (Underground and Above Ground) shall be proposed. The Control center buildings shall be comprising various rooms for different purposes but not limited to the following:

	Item	Main		Backup	
		TCS	DCS	TCS	DCS
1	Control room (to accommodate	1	1	1	1

	Video wall, Workstations,				
2	Servers room	1		1	
3	Telecom room	1		1	
4	Offices	3	3	2	2
5	Meeting room	1		1	
6	Security room (with CCTV camera monitoring system + big screens)	1		1	
7	Washroom with a shower and room for changing clothes,	2		2	
8	Store	1		1	

Note: The consultant firm will also assess all the requirements (scope of work, implementation plan, etc.) to relocate the existing SCADA/EMS/DMS systems and hardware's including video walls and workstations to the new control centers (both main and Backup).

3.2.1 Requirement and features for Control centers

A. Building

- ✓ The proposed buildings for control centers (main and backup) shall be underground of G+1 (the top covered by garden/parking, plantation, etc.) and/ or Above ground (a standard buildings)
- ✓ Depending on the building and the security risks it faces, the center might need extra strong construction materials

B. Control room

- ✓ Fully customizable, high-tech features, superlative Ergonomics, space Age design
- ✓ A properly designed illumination plan to enhance the performance of the operators and as well as to combat the fatigue and stress levels
- ✓ Acoustic balance and control is of utmost importance in the control room. Therefore, the consultant shall take into accounts various acoustic types (like environmental acoustics, aero-acoustics, psycho-acoustics, speech recognition, vibrations in and around the control room, etc.)
- ✓ To study the traffic practices. Traffic flow management plan to enhance the ease of operator movements and lessen the chances of any congested work practices in the control room as the control room requires a focused and unperturbed concentration.
- ✓ The entrance / Exit of operators and their movement to be considered
- ✓ Other offices/ rooms shall not be accessible solely from or via the control room.

4. DESIGN CONSIDERATIONS FOR BOTH CONTROL CENTER AND COMMUNICATION BUILDING

The Consulting firm, in close consultation with EDCL Project Management Team, shall consider the following factors in developing the design and technical documentation:

- a) Relevant British and Rwanda Standards for Engineering designs;
- b) ISO 11064 for Ergonomic design of control centres and detailed description of features of the control suite, including room arrangements, equipment, workstation displays and operator controls, which meets the control center's overall requirements with regard to development, procurement and construction
- c) Location and environmental context;
- d) Buildings orientation to the slope of the site, sun, and prevailing wind;
- e) Soil test to determine foundation design;
- f) Develop the project design to make the best social and space use of the project;
- g) Contour Survey to determine the ground profile.

5. DELIVERABLES

Detailed designs, drawings, and work schedules should be developed but not limited to the below breakdown:

1. Geotechnical study reports
2. Environmental and Social Impacts Assessment Report and associated permits (e.g., EIA report and provide EIA certificate, etc.)
3. Detailed designs, drawings, and work schedules should be developed but not limited to the below breakdown:
 - a. Architectural Designs, including plans, sections, details, elevations, and perspectives on a standard scale.
 - b. Prepare tentative cost estimates.
 - c. Prepare General specifications for building materials and workmanship.
 - d. Prepare schedules of proposed building materials and finishes (BOQs).
 - e. The structural drawings (relevant design calculations)
 - f. Internal and external finishes.
 - g. Electrical and IT installations layouts
 - h. External works and landscaping.
 - i. Water supply and waste-water management (Sanitation System/lines).
 - j. Floods & Rainwater drainage system.
 - k. Fire prevention proposals.
 - l. Access roads/ Entrance & Exit
 - m. Project implementation schedule (construction time schedules).
 - n. Preparation of tender documents

Submission of all deliverables mentioned above should be in both hard copies and soft copies as per the standards.

6. EXPECTED DELIVERABLES AND TIMEFRAME

It is expected that 20 man-months effort over a seven-month period would be required to complete the assignment with the following deliverables and timeframe for both Control centers (main and back-up) and REG communication building;

Deliverables	Expectations	Timeframe to complete from effectiveness
Inception report	Presentation of Implementation roadmap, team presentation, Presentation of study methodology, field visits, data collection and analysis techniques, understanding of the assignment and stakeholders	1 st Month
1 st draft report	Having fully understood and benchmarked on REG's service activities and on the new state-of-art control center with SCADA/EMS/DMS systems and future expectations to develop a proposals with clear justification including also the following Design's data: <ul style="list-style-type: none"> - Demonstrate viability of the project in economic, environmental, and technical aspects - Geotechnical and soil Investigations Report - Topographical Surveyed data - Environment and Social requirements - Proposal of layouts arrangements 	3 rd Month
Draft final Report on the proposed scope of the Control Centers	Presentation of report and scope for control buildings, additional hardware and modules comprising at least the following: <ul style="list-style-type: none"> - Architectural, structural, Mechanical, electrical, and plumbing drawings - Calculations notes - Bill of Quantities - Technical Specifications and Data 	5 th Month

	Sheets	
Environmental and Social Impact report	Full EIA and SMP report	
Final Report Presentation	Submission of Final Reports and presentation to various stakeholders	6 th Month
Submission of final report accommodating stakeholders' comments/inputs	<ul style="list-style-type: none"> - Final report including EIA/ESMP - Tender documents, - Designs documents 	7 th Month

7. REQUIRED FIRM SPECIFIC EXPERIENCES

The Consultant shall be an Architectural and Engineering Firm with demonstrable knowledge and experience in architectural and structural design of similar or higher capacity buildings and preparation of bidding documents for such buildings as well as preparation of the associated environmental and social risk assessment reports. The firm shall also have demonstrable knowledge and experience in designing and or implementation of similar SCADA/EMS/DMS systems. Specifically, the Consultant must demonstrate to have:

- At least 10 years' experience in undertaking detailed designs (architectural, structural and building services) of building structures.
- Specific experience of at least one similar assignment involving design of building structures with high security data protection systems in the last 10 years
- At least one specific experience in designing and or implementation of similar SCADA/EMS/DMS systems in the last 10 years.

8. TEAM COMPOSITION & QUALIFICATION REQUIREMENTS FOR THE KEY EXPERTS

Expertise	Responsibility	Qualification and experience	Time inputs
Team leader/ Lead consultant	Will be the team leader and shall oversee the overall coordination of the Consultancy activities	Architect, Electro-mechanical or Civil Engineer with at least fifteen (15) of professional experience including 10 years in designing similar projects and being team leader in at least 3 similar projects	7 months
Architect	Will prepare detailed design	At least Bachelor of	2.5

Expertise	Responsibility	Qualification and experience	Time inputs
	incorporating the design work done by other consultants and prepare all necessary production drawings with all details and specifications necessary for regulatory approval.	Architecture (BArch) degree with at least 10 years of working experience in similar project and registered by the relevant professional registering bodies	months
Civil / Structural Engineer	Will prepare the structural / civil engineering drawings, calculation notes and specifications necessary for the preparation of tender of construction work.	At least BSc in Civil engineering with at least 10 years of working experience in similar project and registered by the relevant professional registering bodies.	2.5 months
EIA Expert	Will prepare necessary Environment Impact assessment report and follow up on approval by RDB, this will be used during the implementation of the project	At least Bsc in environmental Engineering and REMA recognized EIA registration course/ Registered EIA Expert with REMA with at least 10 years of professional experience in EIA on similar project and having worked on at least 3 related projects in Rwanda	1 month
SCADA system expert	Responsible for developing a scope of work and plan schedule and other engineering requirements regarding the relocation of existing SCADA/EMS/DMS systems and hardware to the new control center (both main and backup)	At least Bachelor's degree in electrical, electronics, industrial or computer Engineering with a minimum of 10 years of experience. Minimum of 5 years of experience in Creation architecture and design documentation for data acquisition and control solutions. With proven experience of SCADA system and hardware.	2 months
Electro-Mechanical Engineer (Building Services)	Will prepare the Mechanical (Firefighting system, HVAC system) & Electrical engineering drawings	At least BSc in Mechanical/Electrical engineering with at least 10 years of working experience in designing building electrical	2 months

Expertise	Responsibility	Qualification and experience	Time inputs
Engineer)		and mechanical installations (plumbing, firefighting systems, air-conditioning, etc.), and registered by the relevant professional bodies Minimum of 5 years of experience in similar projects	
Quantity Surveyor	Will prepare Bill of Quantities and detailed cost estimate in line with the budget allocation. The QS will also compile the tender document in readiness of tender action in line with procurement rules.	At least Bachelor degree in Quantity surveying with at least 8 years of working experience in similar project and registered by the relevant professional registering bodies and also having worked on at least 3 related projects in Rwanda as a quantity surveyor	1 month
IT Engineer or Communication Engineer	Responsible for designing the installation of communication network facilities.	At least BSc in Computer Engineering/Computer Science/Information Technology with at least 10 years of experience with minimum 5 years in networking projects.	2 months

9. REPORTING REQUIREMENTS AND ASSIGNMENT DURATION

As the studies are carried out, reports will be provided at each stage to allow a regular follow up by the Client. In addition to printed documents and drawings which must be submitted in 3 copies, all the documents will also be on FLASH DISK. The overall duration is Seven (07) months and details are per expected project deliverables.

The Consultant must provide the following documents:

- The preliminary design.
- The Detailed design/ construction drawings+ draft tender documents: Tender Documents as well as a confidential estimate of works

➤ Validation of the Design by REG and other invited institution (Rwanda Housing Authority and City of Kigali). The Consultant is held to provide regularly progress report of the study, encountered possible difficulties that shall affect the duration of the studies.

The consultant must present the Project Design to Client and other invited institutions (RHA and City of Kigali etc.) for validation.

REG will have one Month to check the various documents presented at each stage and to require possible modifications of the submitted document. These modifications will have to be transmitted in writing to the Consultant who will incorporate them during the drafting of the following stage.

10. CLIENT'S INPUT AND COUNTERPART PERSONNEL

The client will provide the following services to the consultant:

- a) Provide where possible, available relevant documents and reports which could facilitate the realization of the assignment objective
- b) Avail a team of engineers and support staff to work with during the entire duration of the assignment.
- c) Provide timely access to existing power infrastructures and systems such as Substations, power plants, SCADA/EMS/DMS information to the extent required.
- d) Introductory letters to consult various stakeholders whom consultant may want to engage to be able to accomplish the assignment.

All office space and residential accommodation including the payment of all utility bills shall be the responsibility of the consultant.

ANNEXURE

A. GENERAL INFORMATION AND REQUIREMENTS FOR DRAWINGS AND OTHER DOCUMENTS

1. General Information

All drawings for the proposed project should be compiled into two similar booklets on A3 format whereas the site plan describing the overall placement of the project should be submitted on A0,

➤ **The application letter**, application form, project brief, land ownership documents and all other support documents available on A4 formats have to be compiled into three similar booklets of A4 papers.

- a) **Project Brief:** descriptive summary on the project highlighting the name, title and address of developer and of the project.
- b) **Type of project, compliance to zoning guidelines** (Building coverage, Landscape coverage, Floor Area Ratios etc) and Rwanda building control regulations (Access for people with disabilities, emergency provisions etc), cost of project, implementation plan, Architectural and structural description, and environmental considerations among others.
- c) **The Architectural and structural review** the project proposal should also include a description of the design concept and the reasons of the stylistic, compositional, and typological choices. In general, a short description that allows complete understanding of the Architectural and structural approach. Specifically addressing the following key components:
- i. Object and context
 - ii. Functional quality
 - iii. Architectonical composition
 - iv. Integration of competences
 - v. Environmental sustainability, and
 - vi. Innovation
- d) **For the purposes of environmental review**, the project proposal should also contain a description of the main materials and construction techniques adopted and any measures taken for environmental sustainability. Specifically addressing the following checklist to support issuance of an Environmental Impact Assessment Certificate/Clearance:
- i. Application letter (addressed to the Chief Operating Officer-Rwanda Development Board.
 - ii. Purpose, objectives and nature of project, including attributes such as size of project, design, activities that shall be undertaken during and after the establishment of the project, products and inputs, sources of inputs, etc.
 - iii. Description of the proposed project site and its surroundings and alternative sites, if any, where the project is to be located.
 - iv. Description of all planned activities and all materials to be used;
 - v. Description of how the proposed project and its location conform to existing laws, regulations and policies governing such project and the use of the site/area proposed for its location.

- vi. Description of any likely environmental impacts that may arise due to implementing various phases/stages of the project and proposed mitigation measures thereto.
- vii. Description of all mitigation and compensating measures to reduce, minimize or offset the negative impacts;
- viii. Description of any other alternatives, which are being considered (e.g. siting, technology, construction and operation procedures, sources of raw materials, handling of wastes etc., decommissioning/closure and site restoration).
- ix. Any other information that may be useful in determining the level of EIA required.
- x. Attachments: cadastral(deed) plan/lease contract of the land, project designs etc,

e) Façade of the whole project

- i. A collection of information on existing situation.
- ii. Site geotechnical survey.
- iii. The proposal for a detailed Architectural and structural and technical studies program on the basis of data collected.
- iv. Establishment of sketches.
- v. A report describing the project: various perspectives and materials chosen
- vi. Global cost estimate of the Project.
- vii. Layout plans on scale 1/100 of the various floors.
- viii. Site plan as well as external installation works 1/100
- ix. Longitudinal and transversal sections
- x. 4 color perspectives (front, rear, right and left side)

Notes

- ✓ All the plans will be presented on A3 format
- ✓ The design file will be given in 3 hard copies and soft copies (PDF and Editable formats)

2. General requirements:

- All drawings for the plot with a surface area under 1 ha has to be compiled into two similar booklets on A1 format whereas for the plot with a surface area over 1 ha, the site plan and all drawings describing the overall of the plot will be submitted on A1,

- The project brief, the bills of quantities, the geotechnical, the structural calculation notes and all documents available on A4 formats have to be compiled into two similar booklets

The following documents will be checked into A3 or A4 Booklets:

- a) A copy of right of ownership and a copy of the deed plan including a copy of a receipt of payment of the plot location fees for the current year,
- b) A copy of the Project brief including the project implementation plan,
- c) A copy of structural calculation notes including the soil test results
- d) Perspectives vis a vis surroundings and a topographic map,
- e) A copy of the site plans detailed measurements/designs for all paving, steps, walls, curbs and gutters.
- f) A copy for any Architectural and structural, water, plumbing, drainage, general arrangement of natural and/or artificial ventilation and lighting, electrical, mechanical and structural drawings.
- g) A copy of Bills of quantity
- h) Environmental Impact Assessment clearance.
- i) Construction permit certificate from City of Kigali
- j) Safety measure plan (Fire Management)
- k) Disaster prevention
- l) A free technical assistance to the client for the tender document preparation which shall be done by the procurement unit of the client

Any other particulars, which the applicant feels, would be of assistance to the committee

Notes

- 1) All drawings/plans must be stamped and signed by an architect and Engineer from a competent design consultancy firm (which has submitted the profile in One Stop Center or is officially registered with the Rwandan Architects and Engineers Association),
 - 2) All designs or Site improvement activities shall be done in conformity with the relevant Rwanda laws, regulations and guidelines,
 - 3) Where applicable, the details of any special provisions for persons with disabilities shall be given on all plans and drawings, Architectural and structural drawings.
- ✓ Layout plans on scale 1/100 of the various floors;

- ✓ Site plan as well as external installation works 1/100 | Longitudinal and transversal sections
- ✓ Color perspectives (front, rear, right and left).
- ✓ Other drawings will be made up:
 - ✓ Situation plan oriented on scale 1/100;
 - ✓ block/mass plan oriented on scale 1/100 (on A0 format);
 - ✓ External works (access ways, parking, gardens...);
 - ✓ Building plans (on A0 format) on scale 1/50;
 - ✓ Wall plans (on A0 format) on the scale 1/50 according to the orientation with all the doors, windows and other openings;
 - ✓ Roof plan (on A0 format);
 - ✓ Transversal & longitudinal sections on scale 1/50, 1/100& 1/200.
 - ✓ Indication on the plans of all materials for interior and external elements

All the plans will be presented in A3 format unless otherwise stated

The file to be given will have to include detailed design details and graphic in three (3) copies