LICU BUILDING GUIDE FOR PLAZA 3:

LICU is seeking a climate smart design that will optimize site potential, minimize non –renewable energy consumption, and maximize renewable energy by implementing the use of environmentally sustainable products. Special focus is to be placed on indoor air and light quality, water efficiency, waste reduction, reducing emissions, pollution, and environmental degradation and sustainable operation and maintenance of both the building and the landscaping.

Construction details can include:

- **Smart insulation systems –** to prevent air conditioning or heating leaks to the inside and outside and reduce energy consumption and excessive air conditioning and heating equipment usage.
- **Solar panel system –** to protect the environment, reduce and in some cases eliminate electricity bills, have a low maintenance cost, and ensure energy security.
- **Use non Volatile Organic Compound (VOC) paint – VOC paints** to contain harmful chemicals that vaporize at room temperature and enter the atmosphere impacting the ozone layer and human health.
- **Accessorize to meet the needs of persons with disabilities –** Building sustainability includes occupant welfare and accessibility.
- **Water Catchment technology –** to conserve water and help to reduce runoff, environmental pollution, soil erosion, flooding, and sewer overflows.
- **Utilize windows and natural light –** to provide passive heating and cooling and natural lighting. Windows save money and energy and increase workers' performance, concentration, and health and well-being.
- **Recycling program –** to save energy, labor, money, and resources.
- **Fencing, parking area and landscaping (beautification)–** attractive, environmentally friendly, low maintenance etc.
- **Drainage –** to ensure grounds remain safe and dry.

The structural foundation will need to be designed to sustain a five-storey building with space for future elevators and additional utility systems.

This first phase will comprise of the ground and first floor of the building that will need to house 15 to 25 staff with 8 to 12 office spaces exclusive of lobby area and frontline personnel. Additionally, there needs to be a conference area, kitchen, four bathrooms, filing room, storage for cleaning and office supplies, utility room, vault, server room, ATM and depository bin, generator room (strategically located within the site and well secured), 2 outside bathrooms, outdoor seating and walkways.

A separate lodging quarter away from the business premises is to be included in the plan. This will comprise of two private rooms to house 4 individuals (two rooms with one king size bed (bigger than double bed) in each room. Each room will have its bathroom, small kitchenette and living room.

Establish a strategic area for billboard advertisement.

Establish a strategic area for a security booth.

LICU BUILDING GUIDE FOR PLAZA 3 OVERVIEW:

The goal is a climate-smart, (Initial phase) two-story structure designed for sustainability, functionality, and adaptability. The design balances high-performance building systems with occupant comfort and operational efficiency.

Construction details breakdown:

1. Exterior design elements
2. Interior layout and Features
3. Operational systems
4. Internal and external security systems

Exterior Design Elements:

1. Roof System

- Solar Panels: A solar array system installed on the sloped roof for optimal solar exposure. Battery storage integrated into its own secured and ventilated space.
- Design option for Net Metering or Bi-Directional Metering (**Grid-Tied Functionality**)
- Green Roof Zones: Portions of the roof designated for native plants to improve insulation and water retention.

2. Facade

- To match plaza 1 and 2.
- Window Systems: High-performance, low-E glass windows arranged to maximize daylight and ventilation while minimizing heat gain. Horizontal shading devices incorporated to reduce glare.
- Materials: Recycled metal cladding for modern aesthetics and durability, coupled with wood-finished composite panels for warmth and eco-friendliness.

3. Landscaping and Drainage

- Native plant species arranged in bioswales for stormwater management.
- Permeable pavers in the parking lot to reduce runoff and heat island effects.
- Solar-powered outdoor lighting along the walkways.

4. Accessibility

- Access and egress Ramps, textured tactile indicators, and automatic doors (3 types-sliding, revolving, swinging) or manual doors at entrances.
- Accessible outdoor seating areas with shaded pergolas.

Interior Layout and Features:

1a. Ground Floor

- Lobby and Frontline Area:
- Open, naturally lit lobby with a central reception desk.
- Passive cooling via cross-ventilation through large operable windows.
- A designated area in the lobby or conference room to showcase LICU's evolution (pioneers, pictures, accomplishments etc.) near the vision / mission statement.

1b. Office Spaces

- Six office spaces outfitted with low-VOC furniture and finishes.
- Shared open-office space for collaborative work.

1c. Utility Rooms

- ATM, depository bin, and vault located in a secure zone near the lobby.
- Dedicated server room with energy-efficient HVAC and humidity control.
  Meeting and Amenities:
- A conference room with video conferencing setup, soundproofing, and automated blinds for light control.
- A breakroom kitchen equipped with energy-efficient appliances.

2. First Floor

Additional Office Spaces:

- Six more offices, similarly, equipped to the ground floor.

Filing and Storage:

- Centralized storage room with sustainable shelving systems.

Lodging Quarters:

- This will comprise of two private rooms with separate entrances to house 2 individuals per room. Each room will comprise of two separate beds, bathroom, small kitchenette, living room and energy-efficient fixtures.

3. Bathrooms:

- Four indoor and two outdoor bathrooms equipped with water-saving dual-flush toilets and sensor-activated faucets.

Operational Systems:

1. Smart Insulation and HVAC

- Walls and roof incorporate high R-value spray foam insulation.
- VRF (Variable Refrigerant Flow) HVAC system for precise climate control and energy efficiency.

2. Water Systems

- A rainwater harvesting tank for non-potable uses (e.g., irrigation, flushing toilets).
- Greywater recycling system integrated into landscaping irrigation.

3. Recycling and Waste Management

- Designated waste and recycling zones on each floor for easy access.

Materials Palette*

Interior Walls and Paint: Non-VOC paints

Flooring: polished concrete in high-traffic areas.

Furniture: Modular, ergonomic, and made from recycled materials.

Future-Ready Design

Structural foundation designed for a five-story building, with space for future elevators and additional utility systems.

Modular design approach for scalability without major disruptions.