Attachment

The above proposed development is referred. Please find our comments for inclusion in your condition of approval on the development plan;

1) SESB requires a 24-hour **UNRESTRICTED** access to the SESB's sub-station site and SESB's sub-station building.

2) Access road to the SESB's sub-station site and building, shall be provided and constructed by the developer at **NO** cost to SESB, catering for vehicle/lorry weighing not less than 10 (ten) tons.

3) Drains surrounding the SESB's sub-station building shall be so designed and constructed to prevent flooding, which could cause severe damage to SESB's sub-station equipment and eventually trigger power outages.

4) The SESB's sub-station building shall be located well away from waste dumping area or Bin Centre, in order to minimize risk of corrosion to SESB's sub-station equipment and underground power cables.

5) All utility services including water, gas, sewerage and telecommunication pipes are **NOT** allowed to encroach into SESB's sub-station buildings and SESB's sub-station site for safety reason.

6) Trees or flowering plants which can grow above 6 (six) feet **SHALL NOT** be planted in the vicinity of the sub-station reserve or directly above SESB's HV/LV underground power cables, near or underneath the HV/LV overhead power lines. The following clearance **MUST** be attainable for;

   a) Tree planted next to SESB's LV overhead power line Minimum clearance 2M.
   b) Tree planted next to SESB's 11kV HV overhead power lines Minimum clearance 2M.
   c) Tree planted next to SESB's 33KV HV overhead power lines Minimum clearance 3M.

7) SESB's verandah main cable above the 5 (five) footway/pavement must **NOT** be covered at all time.

8) Any water tapping point or bulk water meter installation or fire hydrant shall be located well away from the front access of the sub-station building in order **NOT** to hinder SESB's personnel from carrying out routine maintenance work on the SESB's sub-station equipment, etc.

9) **NO** permanent structure is allowed to be constructed directly above the SESB's underground power cables as SESB requires access to maintain and repair the cables should fault developed.

10) Piling for the SESB's sub-station building foundation shall be provided for by the developer at **NO** cost to SESB.

11) The floor level of the SESB's sub-station building shall be at least 6 (six) inches above the finished level of the development site.

12) Developer is required to submit a revised plan to SESB should changes are made to the location of the approved sub-station site, size or type of sub-station building. Written approval/confirmation must be obtained from SESB.

13) A reserve of 3 (three) feet wide shall be provided for SESB's distribution cables within the perimeter of the development site and shall be free from other utility services, **EXCEPT** where unavoidable all SESB's electrical infrastructure shall be effectively protected against mechanical damage.

14) Drawing in the scale of 1:500 or 1:750 indicating the proposed SESB's HV/LV underground cable route, HV/LV overhead line cable route, sub-station building, etc shall be submitted to SESB's local office by the consultant engineer when application for power supply is made.

15) Land title for SESB's sub-station site, strata/subsidiary title for SESB's sub-station building or SESB's HV switch room **MUST** be surrendered to SESB upon the issuance of the same by the Land Registry.

16) Consumer Connection Charges of installation of SESB's electrical infrastructure must be paid in full amount.

17) Extreme care must be exercised while doing site reclamation or construction work so as **NOT** to damage or cause any damage to the existing SESB's high voltage overhead power line / high voltage underground power cable.

18) The cost of relocation of any existing SESB's electrical infrastructure in the area, **IF** technically required shall be borne by the developer.

19) Before any electrical schematic drawings are prepared, the consultant engineer and electrical wiring contractor must get the plan certified and approved by SESB's Engineer for the purpose of determining ;

Meter position -The position of the meter shall be determined by SESB's Engineer. Consultant engineer or electrical wiring Contractor shall have the meter position marked or indicated on the plan for approval.
As a general rule, meters are to be mounted in an accessible position to facilitate reading and in such a way the base of the meter shall **NOT** be over 6 (six) feet 6 (six) inches above the floor level.

Minimum permissible height for meters mounted on a gate post shall **NOT** be less than 3 (three) feet or 0.91(zero point nine one) metre from the actual ground level.

(Metering schedule example LV metering, HV 11kV bulk metering, direct current, CT/PT, metering requirement, kWH, kVArh meter, check meter, etc).

21) SESB requires an **UNRESTRICTED** access to rooms/panels having SESB's energy meter and its accessories. Spare key should be extended to SESB, **IF** the rooms/panels are locked separately.

22) Please refer to appendix 1, 2, 3, 4 or 5 for guidelines main meter and sub meter installations. Consultant engineer or electrical wiring Contractor shall comply with the SESB's requirements for metering installations.

23) The constructed SESB's indoor and outdoor sub-station building shall conform to SESB's new corporate colour as follows;

CORPORATE COLOUR	**COLOUR CODE**
SESB red	C:0,M:91,Y:87,K:0
SESB white	100% white
SESB blue	C:98, M:87,Y:7,K:0

SESB grey 20% black

24) In the event of SESB's high voltage overhead transmission line is encountered, please ensure a minimum clearance requirement of 1 (one) chain to the left and right of the transmission line has already been taken into consideration and be **EXEMPTED** from the development area for 2 (two) chain way-leave reserve, involving 66/132kV HV line.A minimum clearance requirement area of 1 ½ (one and a half) chain to the left and right of the transmission line must be taken into consideration and be **EXEMPTED** from the development for 3 (three) chain way-leave reserve involving 275kV HV line.

25) Demand Estimates for Consumer Sub-Classes or Premises (Assigned Load for Type of Premises)

Type of Premises	Rural (kW)	Suburban (kW)	Urban (kW)
Housing Premises			
Low Cost Flats,single storey terrace,studio apartment <600sqft	1.5	2	3
Double Storey Terrace / Apartment	3	4	5
Single Storey, Semi detached	3	5	7
Double Storey, Semi detached	5	7	10
Single Storey Bungalow & three room condominium	5	7	10
Double Storey Bungalow & luxury condominium	8	12	15
Shop Houses			
Single Storey Shop Houses	5	10	15
Double Storey Shop Houses	15	20	25
Three Storey Shop Houses	20	30	35
Four Storey Shop Houses	25	35	45
Five Storey Shop Houses	30	40	55

Table 1.1

Table 1.1 indicates the typical ranges of maximum demand for domestic and shop-lots or shop-houses respectively. These values shall be subjected to revisions based upon of latest results load profiling studies.

Note: The application of the categories 'Rural', 'Suburban' and 'Urban' will be based on the location of the development, the size of the premises (m^2) and the type of development (such as high end or affordable). A summary is as follows:-

Category	Where applicable
Urban	• Central Business Districts (CBD) or city/town centres in SESB Sector 1 areas i.e. Kota Kinabalu, Sandakan, Tawau and W.P Labuan • High end/prestigious development (including for SESB Sectors 2 & 3)

Attachment

Suburban	• Outside of Central Business Districts (CBD) or city/town center of SESB Sector 1 Areas (Kota Kinabalu, Sandakan, Tawau and W.P Labuan) • Town centres of all SESB sector 2 areas:- Lahad Datu, Tuaran, Ranau, Beaufort, Papar, Keningau, Kota Belud, Kudat, Kota Marudu, Semporna
Rural	• All SESB Sectors 3 areas:- Sipitang, Kuala Penyu, Tambunan, Tenom, Pitas, Kunak, Beluran, Kota Kinabatangan, Telupid • Outside of boundary of the developed areas in SESB sector 2 areas

DIVERSITY FACTOR

Purpose	Number of Units	Diversity Factor
For use in calculating the MV & LV fixed rates	Up to 300 Units	0.75
	301-750 units	0.60
	751 & above	Diversity factor will based on discussion between SESB & M&E consultant in view of the huge size of to development
For the calculation of Interim Charge (for 33kV cost component)	Apply to the diversified Maximum Demand at 11kV	0.6

Sabah Electricity Sdn. Bhd. has **NO** objection to the proposed development subject to compliance of all the above mentioned standard general requirements/conditions.

Thank you.

Sabah Electricity Sdn Bhd