# ELECTRIC WIRING AND NETWORK WIRING PLAN & SPECIFICATIONS

### **ELECTRICAL & NETWORK INSTALLATION**

## 1. General

- 1.1. The Electrical Work shall be carried out strictly in accordance with the standard specifications and shall also conform to the requirements of Maldives Energy Authority.
- 1.2. All materials to be used in the Works shall be of standard make and shall bear the certification marks of local authorities.
- 1.3. The Contractor shall arrange for the inspection of all Medium Pressure Installation by the Electrical inspector of the local electric supply authority from where the electricity connections has to be obtained.

#### 1.4. Scope of work

- ➤ The work consists of performing the internal electrical Wiring & Network wiring of power Sockets (Electrical Sockets) & Network Points.
- All cables root to be on the floor.
- D boards and socket point and network points shown in the diagram.
- Drilling to the columns are not allowed.

#### 1.5. Prequalification

➤ The Electrification Work shall be carried out only by a licensed contractor authorized to undertake such work under the Maldives Electricity Bureau.

#### 1.6. Rules and Regulations

➤ The installation in general shall be carried out in conformity with the Electricity Rules of Maldives Energy Authority.

#### 1.7. Standards

- ➤ The latest relevant British Specifications, and I.E. recommendations shall be applicable and be followed for the Sockets & Circuit Breakers.
- > Intonations standard Should be followed in the Network Wiring

#### 1.8. Conduit

- ➤ Should Use Hard Conduit Pipe 25mm and 20mm
- Casing Should be used for the columns

#### 1.9. Wires, Cables and Cords

- ➤ The wires & cords for the conduit wiring shall be single core, made of stranded copper conductors, PVC insulated, tested to B.S. 6004, 1975. The voltage grade shall be 300/500 volts or 450/750V.
- ➤ All the wire and cables shall be of the approved standard of Maldives Electricity Bureau. For 13A Socket circuit wiring with 2.5 mm square.
- All wiring shall be continuous between terminations and use of connectors or joints is not be allowed. Spur and tee connections are strictly prohibited. Network cable must be in the separate conduit pipe, cable should be CAT 6 cables.
- Network cable must be in the separate conduit pipe, cable should be CAT 6 cables.

## 1.10. Wiring Accessories

Socket units shall be single, pole, 3 pin rated 13A, 230V, 50 Hz. These shall be molded plastic type with white integral built-in faceplate. Each socket shall have its control switch by the side of it on a common faceplate.

#### 1.11. Distribution Board

- The distribution boards shall be either free standing, cubical type or wall mounting type suitable for fully recessed mounting. Each distribution board (D B) shall be tropical in design, fully dust and vermin proof and liquid repellent.
- > D.B & Network switch Points are shown in the drawing.

## **DRAWING DETAILS**

## **❖** BD08

- From SW01 to SW54.
- C.B 54(10A).
- S.W 108(double gang).
- The Incoming of DBO8 is from DB01.

### **❖** DB07

- From SW55 to SW100.
- C.B 46(10A).
- S.W 92(double gang).
- The Incoming of DB07 is from DB03.

## **❖** DB06

- from SW101 to SW146.
- C.B 46(10A).
- S.W 92(double gang).
- The incoming of DB06 is from DB04.

#### **❖** DB05

• from SW147 to SW150.

## **❖** BD03

- from SW151 to SW158.
- ❖ Total sockets 316(Double gang socket).
- ❖ Total Circuit Breaker(10A) 158.
- ❖ NS01 Network point [C] 01 to 27.
- ❖ NS02 Network point [C] 28 to 50.
- ❖ NS03 Network point [C] 51 to 78.
- ❖ Total Network point is 78.