ILLUMINATION OF ANCHOR AT COPT AVENUE WALKWAY

I. SCOPE OF WORK

The proposal covers "Providing Illumination for the Anchor installed at CoPT Avenue Walkway"

The detailed Scope of Work is as given below:

- 1. Design, supply, installation, testing and commissioning of external sign board with content "COPT AVENUE" & "WALKWAY" as per the technical specification attached.
- 2. Design supply installation and testing and commissioning of acrylic wall mounted Signboard of size 80cm x 40cm as per the technical specification attached.
- 3. Supply, Installation, Testing and Commissioning of 15W LED Warm white surface mounted beam spot lighting
- 4. Shade lighting with water proof LED strip.
- 5. Supply and providing necessary DBs/Junction boxes ,cabling etc for commission the illumination system.

II. TECHNICAL SPECIFICATION

A. Supply

1) Item No. 1. "COPT AVENUE"

The Letters in "COPT AVENUE" shall be 1 feet height and 3 inch thick in English at specified location made of SS304 Box letters with 3mm ACP on rear side. Letter front face shall be made up of 4mm solid acrylic 040 of approved color and make. Letters shall be fixed using MS angle 50x50x6mm as base and 25mm MS tube as letter backing, to be shaped in line with the alphabet. Letters shall be lit with white LED of approved make with required power supply. The system has to be wired to an outdoor light timer/nature switch consisting of MCB, timers, contactors of suitable rating and all accessories including wiring as required etc.

2) Item No. 2. "WALKWAY"

The Letters in WALKWAY shall be 15 inches height and 3 inch thick in English at specified location made of powder coated channel and to be made of SS304 Box letters with 3mm ACP on rear side. Letter front face shall be made up of 4mm solid acrylic 040 of approved color and make. Letters shall be fixed using MS angle 50x50x6mm as base and 25mm MS tube as letter backing, to be shaped in line with the alphabet. Letters shall be lit with white LED of approved make with required power supply. The system has to be light timer/nature wired to an outdoor switch switch consisting of MCB, timers, contactors of suitable rating and all accessories including wiring as required etc.

3) Item No. 3. Acrylic wall mounted Signboard

Acrylic wall mounted Signboard shall be made up of size 150cm x 40cm milky white acylic sheet as base of 3mm thickness. Letters and logo with laser cut acrylic letters of thickness 3mm.

4) Item No. 4. Beam spot lighting

Out door type Beam spot lighting shall be of

- a) 15W LED
- b) Warm white or suitable type.
- c) surface mounted

5) Item No. 5 Shade lighting

Shade lighting shall be made of $\$ water proof warm color LED strip 12 V $\$ fixing with LED casing

B. <u>Installation of the system</u>

1) General

The installation, testing and commissioning shall be carried out in accordance with specification/ manufacturer's recommendations, and relevant standards or as directed by owner/Engineer-In-Charge. It is the responsibility of the contractor to supply all equipment, items, accessories, materials, tools, tackles, scaffolding transporting, unloading of the equipment at site, lifting of equipment consumables etc, required for the installation and successfully commissioning of the equipments and handing over of the installation to the entire satisfaction of CoPT.

The erection scope shall include supply of all hard wares and accessories such as bolts, nuts, washers, gaskets, cable termination accessories, lugs, paint, primer, sand, etc. required for completeness of the work. All civil works required for fixing the same will will be under the scope of contractor. Any damage to the structure shall be made good by the contractor if any during the work.

The equipment/items to be erected shall be handled with care by experienced workers under the guidance of the competent supervisor. Proper handling and transporting equipments are to be used and dragging is to be avoided. All tests shall be carried out in the presence of CoPT's representative.

The picture of the structure, logo, letters etc. with sample lighting design is attached.

2) Technical

- a) All the necessary MCBs, DBs, Junction boxes, timer control panel, cables, cable gland, wiring materials etc for wiring, testing and commissioning shall be in the scope of the contractor. DB/JB's shall be of IP66 with polycarbonate material (Hensel or equivalent)
- b) The main cable shall be Armoured , stranded, copper with sufficient size . All other Cables shall be of copper .
- c) Makes of the LED and other items used shall be standard, reputed make and of proven quality with IS
- d) The position of light for beam spot lighting (Item No.4) shall be such that the anchor is illuminated maximum.
- e) Necessary grooving for fixing the LED strip for shade lighting (item No.5) if required shall be done by the contractor.
- f) Power supply for lighting the structure , sign board etc. will be made available near the proposed location/work site by CoPT. Power cable for the purpose shall be provided by CoPT (approximately 25m) . However laying of the power cable , supply and fixing of the JB/DB for tapping supply will be in the scope of the contractor .
- g) The position for fixing the letters will be finalized as per the site condition and approval of the Engineer in charge