

NSR GREEN WOODS ELECTRICAL WORK

ITEMS

- 1. TAPPING 24 Hrs (URBAN FEEDER) 11 KV LINE** from the existing and nearest 100 KVA DTC and drawing the line to the GREEN WOODS LAYOUT Entrance in Bellavi Village. It includes,
 - a.** RCC Poles to draw the lines
 - b.** 11 KV Lines / Conductor
 - c.** All the required DP Structures, Breakers & GOS. The DP structure should be installed to spun pole with neat finish in the entrance of the GREEN WOODS LAYOUT.
 - d.** Complete Labour to do this job
 - e.** All the required BESCO and any other bodies Approvals
 - f.** Any deposits or payments to the Govt. Authorities
 - g.** Everything required to get the urban power (24 hours line) to GREEN WOODS LAYOUT

- 2. BESCO APPROVALS** and liasoning with the required Officials/Offices
 - a.** Obtaining the required approvals from the BESCO and any other Office to proceed with implementation of the Electrical connections/lines to the GREEN WOODS LAYOUT
 - b.** All the incidental charges involved.
 - c.** Following all the required procedures set by BESCO for the Electrification of a Layout and ensuring no violations and future troubles
 - d.** All the deposits and Fees to BESCO and to any other Office to enable these approvals.

3. LAYOUT ELECTRICAL INFRASTRUCTURE WORK

- a. BEST QUALITY 250KVA PEDESTAL MOUNTED TRANSFORMERS (TWO NUMBERS) AND 100 KVA PEDESTAL MOUNTED TRANSFORMER (ONE NUMBER) :** Supply, Installation, Testing & commissioning of 250kVA/100kVA Aluminum wound Distribution Transformer 11KV /433V with Off Load Tap Switch, Buchholtz relay winding temperature indicator, oil temperature indicator, marshalling box with wiring, Oil level indicator with +5% to 10% steps of 2.5%, HT and LT bushings with all standard accessories as per latest IS Standard technical specification.
- b.** Good quality Pedestal mounted Cubical Breaker instead of DP Structures or well finished breaker with all the required equipment with the Spun Pole – Three Numbers
- c. ADEQUATE NO. OF 9Mts LONG RCC POLES** (well finished), to space them correctly as per BESOM norms and to cover complete layout including park areas, all the 88 sites and all the road lengths. Fixing the same firmly in the ground either with concrete or gravel and stones to make sure the lines are tightly fixed to avoid any sagging of lines : Supply and Erection of 9Mtr RCC Pole including earth work etc., Complete as per the standard technical specification 9Mtr 200Kg WL
- d. ADEQUATE NO. OF STREET LIGHTS** (one for each pole) to cover the lighting in all the roads, parks, entrance and all the common areas – Good quality and good looking 80W capacity CFL Lights with doom and reflector.

- i. The fitting shall be non corrosive high pressure die casting aluminum housing with toughened flat glass
 - ii. Switches should be provided for these Street lights
 - iii. Includes Fitting, CFL 80W bulb and required wiring and earthing.

- e. GOOD QUALITY RABBIT ACSR CONDUCTOR** to draw the LT line to all the Poles and HT line to both the transformers
 - i. Supplying and Stringing of ACSR Conductor for HT line(6/2.59mm+1/2.59mm steel) 3 wire
 - ii. Supplying and Fixing of Rabbit Conductor for LT line(6/3.15mmAl+6/3.15mm Steel) 5 wire

- f. GOOD QUALITY DISTRIBUTION BOXES** with required Bus bars or/and any other required equipment, and, fixed to the Poles (Pedestal Mounted) to tap the LT line to each site. Each box should have enough termination points to connect to the designated sites around that Pole and some points to tap to the nearest parks. Also, one cable with enough capacity should be drawn from the overhead line to the box to tap 5 or 6 KVA lines for each site terminated there.

- g. LAYING GOOD QUALITY PVC PIPES** with caps on both sides to draw the underground cables from the Distribution box near Pole to the each site. : Preparation of outdoor Cable Trenches to each Site including excavation, back filling, sand filling, cable tiles, compaction etc., as per specification.

- h.** All the common area Meters wherever required with good quality boxes and fix them to the poles

- i. ADEQUATE GROUND EARTHING** shall be done near the Sub Stations/Transformers and/or near any other required common places :
- i. Providing, installation, testing and commissioning of G.I Pipe earthing station including excavation, back filling, 40mm G.I pipe of 2.5m long, construction, inspection chamber, chamber cover [C.I], disconnecting link etc., in conformity with IS 3043. The rate shall include the supply and filling of salt and charcoal.
 - ii. Providing, installation, testing and commissioning of copper plate earthing station using 600x600x3.15mm copper plates including excavation, back filling, construction of inspection chamber, chamber cover [C.I], disconnecting link etc., in conformity with IS. The rate shall include the supply and filling of salt and charcoal.
 - iii. Providing and laying earthing conductors of G.I / copper strips including necessary accessories. The rate shall include all supports, accessories and hardware necessary for proper installation.
- j. SUBSTATION FENCING (FOR BOTH THE SUBSTATIONS / TRANSFORMERS) :**
- i. Supply & fixing of chain link fencing of height 1.8mtr. With necessary clamps, fasteners, binding wires, earthing of fencing at all sides with suitable GI wires including all accessories as required. It also includes necessary civil works, shall be painted with 2 coats of anticorrosive primer & 2 coats of Aluminum enamel paint
 - ii. Supply & erection of M.S. gate of size 1200mm wide & 1800mm height with all accessories, earthing of gates with braided copper

including necessary civil works. Gate shall be painted with 2 coats of anticorrosive primer & 2 coats of Aluminum enamel paint.

iii. Supply & spreading of 40mm blue metal jelly for a thickness of 100mm over a river sand bed of 50mm. Rate shall include cleaning & leveling of the yard as required at site.

k. This work should ensure, no ROAD cuttings in future to draw the lines to both sides of the road inside GREEN WOODS LAYOUT.

l. Wherever required Cable should be used in this scope of work, to avoid any inconvenience to nearby structures.

m. This work includes complete labor, material and approvals for loading, commissioning and enabling the Electrical service to the entire layout. It also includes all incidental charges.

n. All work should be done with neat finish and good quality workmanship.

4. OTHER WORKS

a. The existing rural overhead line which is passing through the GREEN WOODS LAYOUT to the adjacent of the land (in Sy.No. 68/1) shall be changed to alternative route to avoid going through the layout area.

b. Getting 3 Phase 5 KVA Connection to Front Office, Borewell and Other needs. Which includes, Deposits/Fees, BESCO Approvals and fixing the required Meter boards including laying the cable till the Meter board from the nearest pole.

c. Getting 3 Phase 20 KVA Connection to Clubhouse area. Which includes, Deposits/Fees, BESCO Approvals and fixing the required Meter boards including laying the cable from the nearest Pole till the Meter board.

- d.** Connections to all the common areas and Park Areas with enough Street Lights
- e.** The complete Green Woods Layout Electrical Infra Handover process to BESCO after one year, as per BESCO guidelines.
- f.** This work includes all the deposits/fees to be paid to the different offices, labor, material, liasoning work, and incidental charges for this scope of work