

## 7. UTILITY PLANNING: ELECTRICITY SUPPLY & TELECOMMUNICATION SERVICES

### 7.1 Electrical Power Requirements

The proposed asphalt mixing plant will require electricity in the order to ensure normal operation for the various activities. There is an already existing transformer on the proposed site and therefore connection to electricity supply will easily be undertaken. However, the promoter will confirm from the CEB if the already available infrastructure will be able to withstand the electricity loading of the plant. The company will also make provision for a stand-by generator for power supply in case of electricity grid failure. The generator shall be of indoor type with all the acoustic treatment being considered; its rating will be calculated by the supplier at a later stage of the project. Details of impacts and mitigation measures related to the utilisation of the generator are discussed in details in Section I on mitigation.

### 7.2 Fuel Requirements

The plant will also make use of Diesel for the running of the plant and for the vehicles. As such, a dedicated fuel storage tank of 15 m<sup>3</sup> capacity will be made available on the site. The fuel tank will be fitted with a dispenser. Contingency plan related to the fuel tank is discussed in the mitigation section of the report.

### 7.3 Electricity Installation Provisions

A sub-station comprising of HV switchgear and transformer will be provided for the incoming High Voltage supply. The transformer will step down from 22KV to 400 V, feeding the Main LV panel located adjacent to the transformer cubicle, via automatic changeover panel in the transformer cabin. The main incoming HV cable will run underground in protected cable trenches. Low voltage cables will have copper conductors and PVC insulation, and where installed directly in the ground, the cables will further be protected by steel wire armouring. All retribution cables will be earth conductors, which will be earthed at source. The main low-voltage distribution board will be located near the transformer and will feed several sub-distribution boards installed in safe and convenient location around the site. All distribution boards will be mounted in a protected area in order to protect the switchgear from deterioration due to weather conditions.

### 7.4 Telecommunication Services

A well established telephone network will ensure continuous communication among the staffs within the various sections of the proposed facility.