

Under ground services shall not be present within this corridor up to 5.0m below the ground level. OHTL shall be 25-30m away from gas pipeline / oil pipeline and 7.0m away from steel pipe or cast iron pipe.

Location of OHTL for ADDC (in addition to TRANSCO - OHTL) with respect to water service corridor and ADNOC service corridors shall be re checked / re evaluated to maintain the required safety distances and practical easy crossing in addition to better appearance / arrangement for the highway / main roads.

#### 4.4.4.3 TRANSCO Cables

The underground power supply consists of a variety of cables, which traverse along the ROW. Based on the voltage carrying capacity of these cables, 3 different kinds of cable corridors are allocated to accommodate 132kV, 220kV and 400kV cables. Typical minimum corridor widths with respect to different voltage levels are presented in Table 11.

**Table 11: Typical Corridor Requirements**

Voltage Level (kV)	Typical Corridor Width (m)	
	Single Circuit	Double Circuit
132	3	5
220	3	5
400	4	6

The minimum depth of the power cables is 1.3m for installation in troughs and 3.5m for open cut/shielded tunnel. The maximum allowable utility corridor depth is 2.0m for installation in troughs and 4.0m for open cut/shielded tunnel.

The vertical and horizontal clearance of 0.5m to the existing facilities shall be maintained. In case the approved route coincide with the trees, sufficient depth (minimum of 0.8m) and with TRANSCO approved protection measures should be provided. For typical detail of underground 400kV, 220Kv and 132kV cable corridor refer to Standard Drawings Manual.

The underground cables shall be accommodated within the third or fourth available corridor at the beginning of the service corridor from the edge of the road. ADDC water and electrical corridor can be adjacent to each other and similarly the TRANSCO water and electrical corridors can be adjacent to each other

Minimum clearance of 2.0m shall be maintained between cable corridor and nearby pressure pipelines. If the cables are arranged horizontally (without cable trays), they shall be fixed at least every 0.7m, and at least every 1.0m for vertical arrangement (at walls, racks, etc.).

#### 4.4.4.4 AADC/ADDC Cables

The underground power supply network comprises of LV and MV cables and the required corridor widths for these cables will be in accordance with the ADWEA/AADC/ADDC requirements and standard details. The minimum spacing between cables shall be 0.3m for LV cables, 0.4m for 11 and 22KV cables and 0.5m for 33KV cables. The trench width for 11KV and 22KV cables shall be such that for one, two and three cables will be 0.5m, 0.8m and 1.25m, respectively. Similarly,