

### Fibre Optic Corridor Locations

Two separate dedicated fibre optic corridors are considered:

- High Security (HS); and
- Traffic Surveillance (TS).

The fibre optic networks within these two corridors include, but are not limited to:

- TCS (Department of Transport – Traffic Control System);
- ITS (Department of Transport – Intelligent Telecommunication System);
- ADP (Abu Dhabi Police – CCTV system);
- SC (Signal Corps); and
- FE (Monitoring and Controlling Centre or MCC – Falcon Eye system).

Table 4.17 illustrates to which corridor category these fibre optic networks belong (i.e. HS or TS corridor).

HS and TS fibre optic cables shall be installed in Avenues and Boulevards. In instances where the RoW of the Avenue and/or Boulevard is limited, whereby two independent corridors cannot be accommodated, HS and TS fibre optic cables may be combined into one single corridor, designated as 'HS/TS'.

Fibre optic corridor locations for HS and TS are illustrated in Figure 4.35.

Table 4.17: Fibre Optic Corridors Categories

Purpose	Key	Fibre Optic Line Types				
		TCS	ITS	ADP	SC	FE
High Security	HS			✓	✓	✓
Traffic Surveillance	TS	✓	✓	✓		
Combined	HS/TS	✓	✓	✓	✓	✓

### Fibre Optic Corridor Widths

The width of fibre optic service corridors are based on the number and size of ducts, array arrangement, chamber sizes and duct spacing requirements, etc. Fibre optic corridor width allocations are presented in Table 4.16. Fibre optic chambers shall be located within the chamber corridors and be in accordance with the Department of Transport's and the relevant utility providers' requirements.

### Combined Fibre Optic Corridors

Separate chambers along the combined fibre optic corridor shall be provided for each utility provider. In order to limit access within the HS and/or combined HS/TS chambers, HS fibre optic ducts passing through a chamber maintained and operated by a TS provider shall be encased in concrete, thus preventing accidental damage to nearby HS fibre optic ducts. However, concrete encasement for TS fibre optic ducts is not required when installed in HS/TS chambers.

Figure 4.36 illustrates three typical duct formations within HS, TS and HS/TS chambers and trenches.

### Special Arrangements

Where a HS and/or TS corridor is required on a Street or Access Lane, in particular where a police station or the Government of Abu Dhabi Civil Defense facility is located/planned, the Street or Access Lane RoW may be increased to accommodate the HS and/or TS corridor, if required. The ADP, Signal Corps and MCC shall be approached during the early planning stages to incorporate their requirements within the smaller streets.

Where poles are required to carry HS or TS equipment, these shall be located along the corridor dedicated for street lighting/trees and take precedence over trees. When located within the street lighting/tree corridor, a minimum of two encased spare ducts shall be provided within the HS, TS or HSTS chambers as well as within pole foundations to secure passage for the street lighting cables.