CCTV WIRELESS NETWORK – DESIGN AND CONSTRUCT

SCOPE OF WORKS (SOW) – Rev 1.0

FOR

C Ô T E d'A Z U R

1 McDonald Street, Cronulla NSW 2230

Strata Plan 50785



TABLE OF CONTENTS

1. CRONULLA PRECINCT WIRELESS CCTV NETWORK – OVERVIEW 3

2. C Ô T E D'A Z U R – WIRELESS BUILDING CONNECTIONS 3

3. WIRELESS EQUIPMENT – TR-SL5 AND TR-5A ANTENNAS 3

3.1. Antenna Mast Location 4

3.2. Examples of Antenna Mast mounting 5

4. WIRELESS EQUIPMENT PANEL 5

4.1. Equipment Panel Technical Data 5

4.2. Equipment Panel Location 6

5. 240VAC POWER FOR EQUIPMENT 6

1. CRONULLA PRECINCT WIRELESS CCTV NETWORK – OVERVIEW

The Cronulla Precinct wireless project is intended to provide an alternate, cost effective solution for the provision of additional CCTV cameras in the Cronulla precinct and surrounding areas. The establishment of a dedicated wireless network is proposed which will operate at predominately in the 5Ghz spectrum. Antenna locations have been determinate to provided line of sight wireless links to allow the cameras locations to be connected back to the existing CCTV Control room located in Cronulla Police Station.

2. C Ô T E d ' A Z U R – WIRELESS BUILDING CONNECTIONS

The establishment of antennas on the roof of Cote d' Azur will allow line of sight wireless communications, primary with the following locations;

1. Cronulla Surf Club - Cronulla Beach
2. Dunningham Park - North Cronulla Beach
3. Cronulla Central, Library and Community Centre – Cronulla Plaza

3. Wireless Equipment – TR-SL5 and TR-5A Antennas



A combination of TR-SL5 and TR-5A antennas will be used to allow a wireless network to be established between Cote d' Azur and the other locations. The wireless antenna's are manufactured by Tranzeo Wireless Technologies, www.tranzeo.com The antennas are mounted on a galvanised metal post which will be securely fixed to the building structure with supporting braces where required. The cabling will reticulate from the antenna via steel and/or PVC conduit to a metal enclosure located in the roof plant room. A separate antenna is used for each location as the links are point to point communications. All antennas are mounted on the single mast at different heights on the mast.



3.1. Antenna Mast Location

The antenna mast will be located on the upper roof of the building with a view to being lower than the lighting protection currently mounted on the roof. The mast will use similar mounting to the existing antenna's and will not appear much different, visually to the existing equipment mounted on in this area. To avoid surface conduit being mounted on the side of the building (as requested by Cote d' Azur) 2 x 25mm diameter core hole will be drilled through the roof of the plant room. This will allow direct cabling access from the roof to the plant room equipment panel. All cabling will be concealed in conduit. We recommend 2 x 25mm holes as one can be used for the immediate cabling requirements and a spare , 25mm hole and conduit for future cabling to the mast if required at a later date. This will preserve the integrity of the water proofing should additional cabling be required in the future. Cote d' Azur are getting the roof membrane replaced as a separate project after the proposed antenna mast installation is completed and they will arrange the appropriate contractor to suitably attach the new waterproofing system directly to the conduit and ensure the penetration is adequately water proofed. The associated costs of all water proofing will be co-ordinated and bourne by Cote d' Azur with all warranty being provided by their selected contactor.



3.2. Examples of Antenna Mast mounting





4. Wireless Equipment Panel

A metal enclosure 800x600x250 will be provided as a concentration point, allowing each antenna cabling to reticulate from the antenna to the metal enclosure. The enclosure will be mounted in the roof plant room with existing equipment.

4.1. Equipment Panel Technical Data



Model No.:	AE 1058.500
Designation:	Compact enclosure AE, painted RAL 7035, with mount. plate, single door
Variant:	n/a
Packs of:	1 ST
W x H x D:	600 mm x 800 mm x 250 mm
Mounting surface:	20 dm²
Volume:	128,00 dm³
Net weight/ST:	31,92 kg
EAN:	4028177252097
Customs number:	85381000
Protection categories:	NEMA 4, IP 66
eClass 4.0	27-18-01-01
eClass 4.1	27-18-01-01
eClass 5.0	27-18-01-02
ETIM 2.0	EC000261
ETIM 3.0	EC000261

4.2. Equipment Panel Location



5. 240VAC Power for Equipment

The wireless equipment is connected to POE (power over Ethernet) injectors which provide the required power to the antennas. The POE injectors are mounted in the equipment metal enclosure. To provide 240VAC to the equipment panel a dedicated 240VAC power circuit will be provided from the plant room distribution board (DBH II). The new circuit will be labelled in the distribution board.

