



FRONT VIEW
CABLE GLAND SETOUT FOR ANPR
BREAKOUT BOX

NOTES:

1. This drawing is to be read in conjunction with Standard Drawings 1905.
2. Prior to construction, the contractor shall supply an equipment list to the Principal's Representative for approval.
3. Contractor shall ensure the breakout box enclosure and cable glands meet the Principal's minimum specified IP rating.
4. Contractor shall ensure cabling inside ANPR pole is bundled neatly together for maintenance access.
5. The ANPR breakout box shall only house the equipment required for 1 ANPR camera and 1 CCTV camera.
6. Where required by the ANPR camera, the vendor specific breakout box and cabling is between the output of the ANPR breakout box and the ANPR camera. See Standard Drawings 1913 and 1915.

ASSOCIATED DEPARTMENTAL DOCUMENTS:

Standard Drawings
Specifications

REFERENCED DOCUMENTS:

- Departmental Standard Drawings:
- 1905 ITS – Traffic Survey Cabinet Typical Details
 - 1913 ITS – Traffic Survey ANPR Camera Breakout Box Wiring Details
 - 1914 ITS – Traffic Survey ANPR Ethernet – Serial Converter Wiring Harness Details
 - 1915 ITS – Traffic Survey ANPR Camera Pole Typical Details

Departmental Standard Specifications:

- MRTS207 Traffic Survey Foundation Equipment
- MRTS250 Provision of Automatic Number Plate Recognition System

Australian Standards:

AS/NZS 3000 Electrical Installations (Wiring Rules)

CABLE DETAILS

CABLE ID	SIZE/TYPE	FROM	SUPPLY CONNECTOR	LABEL	TO	EQUIP CONNECTOR	LENGTH	COMMENTS
C2	Fabricated Wiring Harness	RJ45 surge	RJ45	ANPR	Serial Converter	RJ45 termination block & RS232	-	Refer Standard Drawing 1914
C3	Cat6 PE Black	RJ45 surge	RJ45	CCTV Comms	Fixed CCTV	RJ45	As per site requirements	POE
C6	Cat6 PE Black	RJ45 surge or RJ45 female terminal block	RJ45	ANPR Comms	ANPR Camera	-	Site specific	Refer to notes 6
C14 or C16	Cat6 PE Black	Traffic Monitoring Cabinet	RJ45	ANPR	RJ45 Surge	RJ45	Site Specific	Refer Standard Drawing 1905
C15 or C17	Cat6 PE Black	Traffic Monitoring Cabinet	RJ45	CCTV	RJ45 Surge	RJ45	Site Specific	Refer Standard Drawing 1905
E1	2.5mm ² Earth cable	Power Surge Protector	2.5mm ² Gray Bootlace	Earth	Earth BP connector	2.5mm ² Gray Bootlace	100mm Bootlace to bootlace	
E2	2.5mm ² Earth cable	Power Surge Protector	2.5mm ² Gray Bootlace	Earth	Pole Earth Terminal	Earth Lug	1m Bootlace to Earth Lug	
P1	3mm ² Automotive twin	Power Surge Protector	4mm ² Orange Bootlace		Capacitor	Spade plug	150mm Spade to bootlace	
P1A	3mm ² Automotive twin	Capacitor	Spade plug		Twin BP Connector	4mm ² Orange bootlace	150mm Spade to bootlace	
P1B	3mm ² Automotive twin	Twin BP Connector	4mm ² Orange Bootlace	Serial Converter	Serial Converter	DC connector	150mm Bootlace to DC Connector	Only required for Serial Converter
P2	4mm ² Automotive twin	Twin BP Connector	4mm ² Orange Bootlace	ANPR PWR	ANPR Camera	4mm ² Orange Bootlace	Site Specific	
P3	4mm ² Automotive twin	Power Surge Protector	4mm ² Orange Bootlace	ANPR Power	ANPR Pole termination block	4mm ² Orange Bootlace	Site Specific	48VDC Refer Standard Drawing 1915

EQUIPMENT SCHEDULE

EQUIP ID	DESCRIPTION	VOLTAGE	QUANTITY	COMMENTS
1	IP67 rated heavy duty PVC enclosure 200H x 150W x 100D	N/A	1	IP67 rated minimum B&R Polynova Model No. PS201510
2	Enclosure mounting plate	N/A	1	B&R Polynova Model No. PS2015/1
3	Terminal Block double screw 1 wire	N/A	1	1X6mm to 2x6mm
4	1-CAT6 RJ45 Surge Protector with din rail clip and earth cable	POE or COMMS	2	Connect Earth cable to Earth terminal. Quantity is site specific. zip tie (or suitable alternative) to false back
5	Ethernet/Serial media converter	ELV/48V	1	Moxa NPort 5110A-T 12-48VDC LAN to Serial RS232
6	Power Surge Protector	ELV/48V	1	
7	Terminal Block double screw 2 wires	N/A	1	2x6mm, zip tie (or suitable alternative) to top of RJ45 termination block
8	75V 4000uF Capacitor	ELV/48V	1	
9	16mm Cable Gland	N/A	5	

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ITS			
TRAFFIC SURVEY ANPR CAMERA BREAKOUT BOX CONNECTION DETAILS		A3	Standard Drawing No
		Not to Scale	1912
		A	Date 03/2023