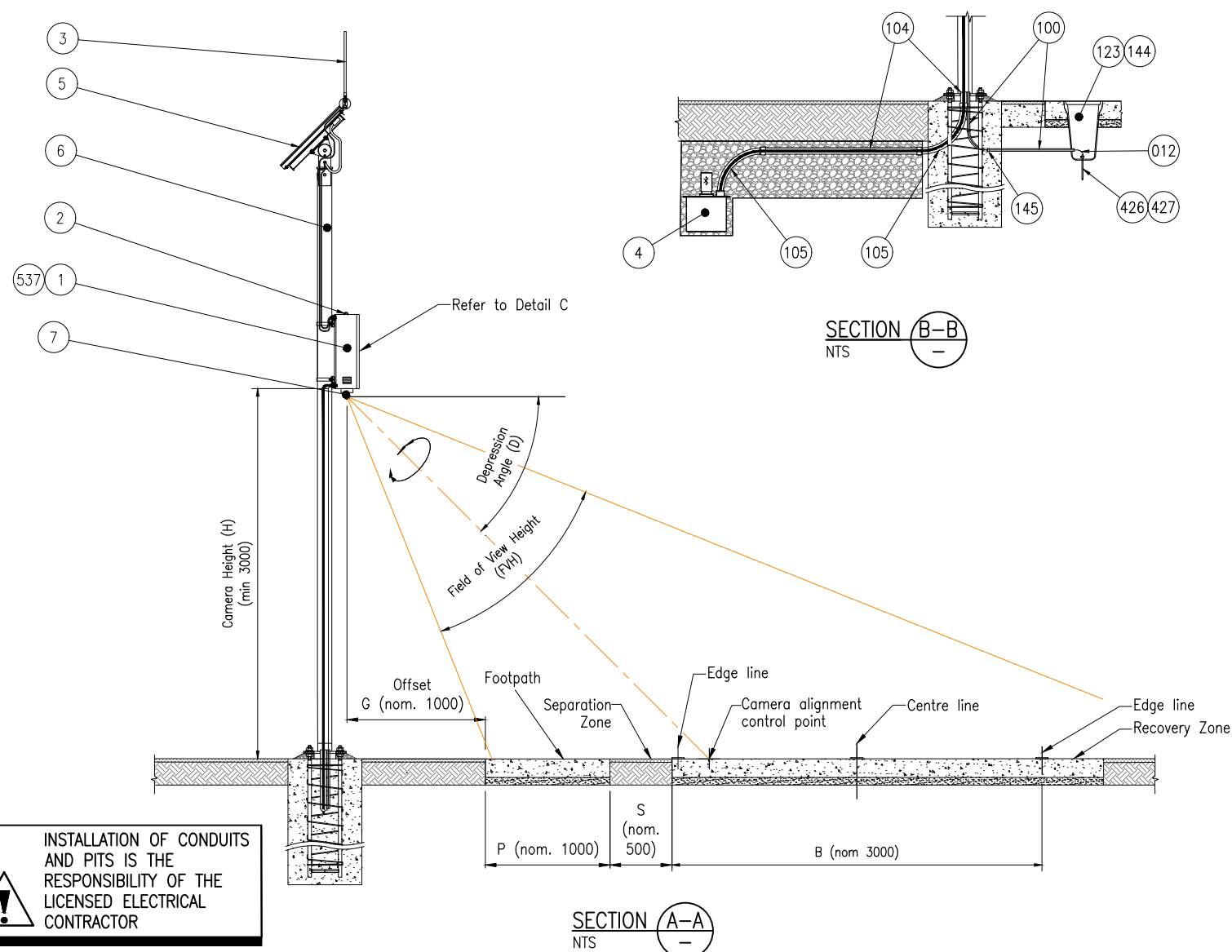


CAMERA ORIENTATION
TOP VIEW

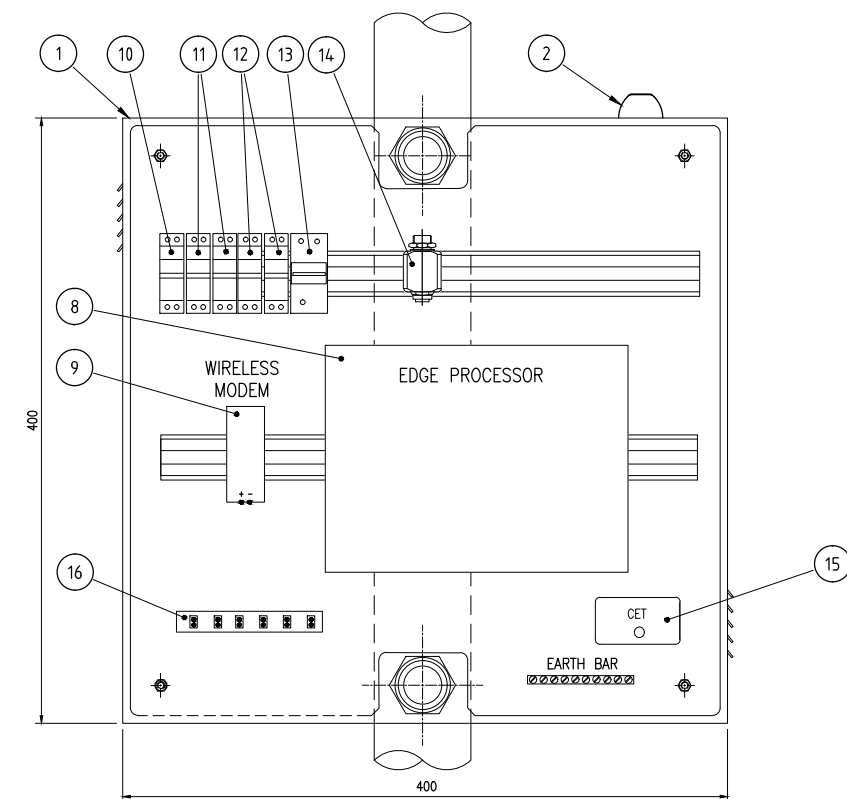


SECTION B-B
NTS

SECTION A-A
NTS

EQUIPMENT LIST AND CONDUIT SCHEDULE

ITEM No.	DESCRIPTION	PART NO.	QTY
1	Equipment enclosure: 400(H)x400(W)x200(D), pole mounted, stainless steel, IP65, lockable		1
2	4G/5G Antenna: external low profile puck antenna, or internal antenna		1 or 0
3	4G/5G high gain external whip antenna: Alternate to suit site having weak signal coverage		1 or 0
4	Battery with integrated MPPT solar charge controller: 12V/200AH, underground power pod	WBSS-12S200 Wom-Batt.	1
5	Solar panel: 12V / 175W (typical)		1
6	Equipment mounting structure: post or hinged pole		1
7	Video analytics camera		1
8	Edge processor, required unless built into the video analytics camera		1 or 0
9	Wireless modem, required unless built into the video analytics camera or edge processor		1 or 0
10	PV isolation switch: 32A double pole		1
11	Load isolation switch: 16A double pole		2
12	Fuse: 20A		2
13	Surge diverter		1
14	RF surge protector: coaxial with DIN rail clip		1
15	Communications earth terminal junction box		1
16	Termination block		6
100	Earth cable conduit: 20mm, HD, rigid PVC, orange, straight	As listed on SD1699	1
104	Battery cable conduit: 50mm, HD, rigid PVC, orange, straight	As listed on SD1699	1
105	Battery cable conduit: 50mm, HD, rigid PVC, orange, 90° bend, radius 300mm	As listed on SD1699	2
123 144	Type 3 lockable pit and lid	As listed on SD1699	1
145	Earth cable conduit: 20mm, HD, rigid PVC, orange, 90° bend	As listed on SD1699	1
012 426	Earth electrode: 13x1500mm, solid stainless steel. Earth cable: 1Cx2.5mm ² PVC	As listed on SD1699	1
427	Earth electrode clamp cable connection block: brass, heavy duty for 12.7mm earth rod	As listed on SD1699	1
537	Site ID label	As listed on SD1699	1



DETAIL C TYPICAL ENCLOSURE LAYOUT

LEGEND

CONCRETE

Acronyms
MPPT = Maximum Power Point Tracking
(Solar Charge Controller)
CET = Communications Earth Terminal

Department of Transport and Main Roads

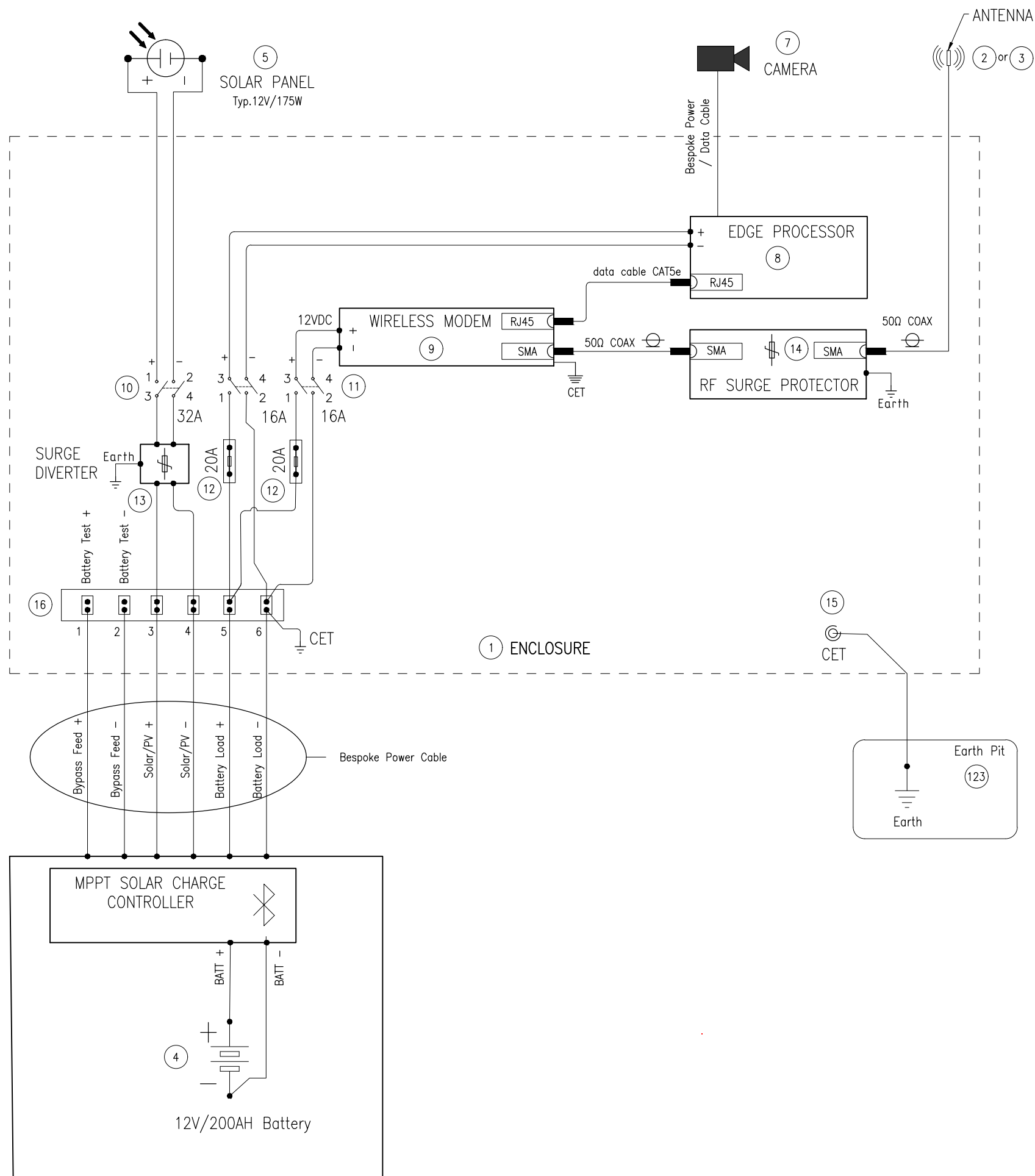
ITS

VIDEO ANALYTICS
ACTIVE TRANSPORT CLASSIFIER
SHEET 1 OF 2



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A3
Not to Scale
A
Standard Drawing No
1930
Date 3/2025



TYPICAL CIRCUIT

NOTES:

- The purpose of this drawing is to illustrate a conceptual arrangement of a video analytics camera on a separated cycle / pedestrian path. The fitness for purpose of this drawing for a specific project shall be determined and certified by RPEQ Engineer.
- Equipment shall comply with MRTS215. Camera, edge processor and modem maybe integrated. The total power consumption of the system shall not exceed 25W.
- Sensor placement shall be in accordance with TRUM Vol 4 Part 5 Section 9. Key design parameters include:
 - Cycle path width (B): nom. 3m
 - Separation zone (S): nom. 0.5m
 - Footpath width (P): nom. 1m
 - Camera offset (G): min. 0.5m
 - Camera mounting height (H): min. 3m
 - Camera field of view, width (FWV) & height (FVH): as appropriate
 - Azimuth angle (A): enough side view to differentiate user type
 - Depression angle (D): as appropriate
- Install TMR approved underground battery per manufacturer's instructions. The solar power system shall comply with MRTS263. MPPT solar charge controller, if is not integrated with the battery, shall be installed in the stainless-steel enclosure.
- Enclosure shall comply with MRTS226. Cables shall not be exposed. Cabling entry points to the enclosure can only be on the back or the side wall; and must be sealed and water-tight. Provide drip loops as needed.
- Earth electrode installation shall be in accordance with SD1679.
- Wiring shall comply with AS/NZS 3000.
- Equipment mounting structure shall comply with MRTS97. Swing pole may be considered for the convenience of maintenance.
- Footing shall be constructed in accordance with MRTS92.
- Only TMR approved mounting structure, footing, brackets, associated steelwork and parts can be used. Any bespoke design and part must be certified by RPEQ engineers of appropriate disciplines and approved by the Principal prior to use.
- Pit and conduits installation shall comply with MRTS91. Pit surround shall be in accordance with SD1440.
- All concrete work shall be in accordance with MRTS70.
- All above-ground items on the mounting structure, including enclosure, solar panel and external antenna, shall be installed at a minimum height of 3m above ground level.
- Dimensions are in millimetres (mm) unless noted otherwise.



REFERENCED DOCUMENTS:

Departmental Standard Drawings:
SD1440 – Traffic Signals/Road Lighting – Cable Jointing Pit Rectangular Concrete Surround
SD1679 – ITS – Telecommunications Field Cabinet Base Installation Details
SD1699 – Traffic Signals/Road Lighting/ITS – Parts List

Departmental Specifications:
MRTS70 Concrete
MRTS91 Conduits and Pits
MRTS92 Traffic Signal and Road Lighting Footings
MRTS97 Mounting Structures for Roadside Equipment
MRTS215 Active Transport Counters and Classifiers (ATCC)
MRTS226 Telecommunications Field Cabinets
MRTS263 Standalone Solar (PV) Power Systems

Departmental Manuals:
TRUM Vol 4 ITS and Electrical Technology Manual Part 5 Configuration and Placement of Traffic Sensors

Australian Standards:
AS/NZS 3000 Electrical Installations (Wiring Rules)

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ITS						
VIDEO ANALYTICS ACTIVE TRANSPORT CLASSIFIER SHEET 2 OF 2		A3	Standard Drawing No			
		Not to Scale	1930			
			Date 3/2025			
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