

**SYMBOLS LEGEND**

- MAINTENANCE HOLE (MH)
- MAINTENANCE CHAMBER (MC)
- MAINTENANCE SHAFT (MS)
- INSPECTION SHAFT (IS)
- BURIED JUMP UP
- INSPECTION OPENING (IO)
- ⊙ WATER SEAL
- PIPE STUB
- ∇ VERTICAL BEND
- RETAINING WALL
- ROCK RETAINING WALL
- MAINTENANCE HOLE (MH), Cover centered over black segment (For MHS with no detailed design)
- ▨ NO REASONABLE ACCESS LOTS
- W— WATER MAINS
- G— GAS MAINS
- E— ELECTRICAL CABLES
- T— COMMS CABLES
- D— DRAINAGE

Services other than Drainage need only be shown where they have a non-standard alignment which will impact construction

**PROPERTY SERVICE TYPES**

- TY1a (no jump up & 45° junction fitting)
- TY1b (no jump up & 60° junction fitting)
- TY2 (jump up adjacent to main)
- TY4a (offset jump up & 45° junction fitting)
- TY4b (offset jump up & 60° junction fitting)
- TY4S (offset jump up connected to shaft)
- TY4B (offset jump up connected to base)
- TYB (no jump up & connected to base)
- TYS (no jump up & connected to shaft)

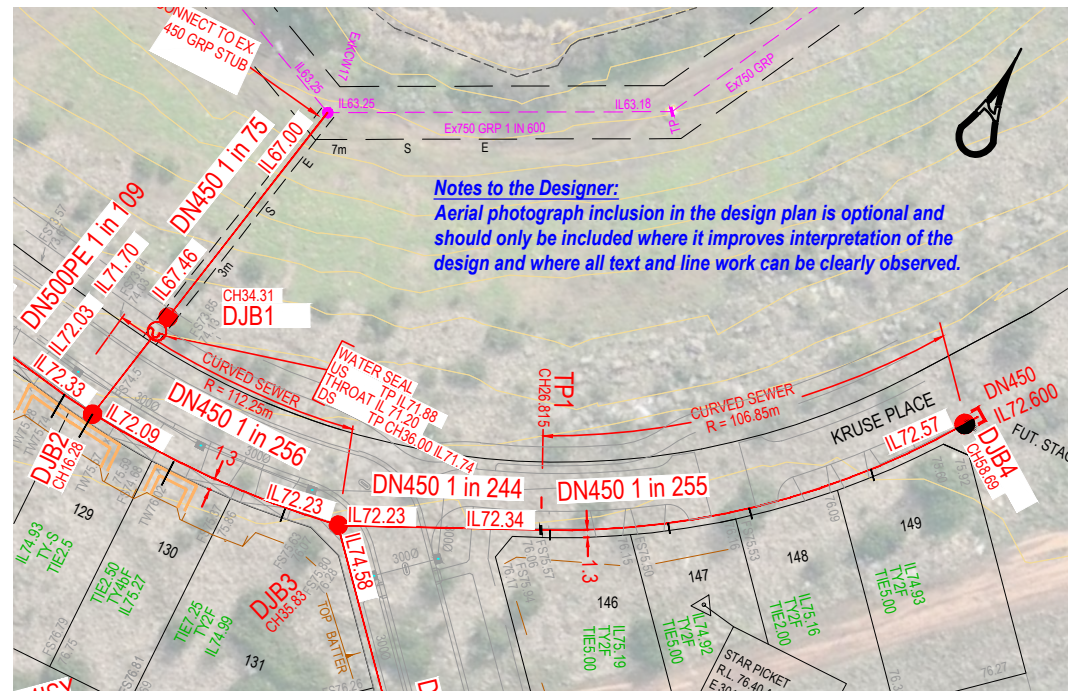
- TY2F (TY2 with tall jump up fittings)
- TY4aF (TY4a with tall jump up fittings)
- TY4bF (TY4b with tall jump up fittings)
- TY4SF (TY4S with tall jump up fittings)
- TY4BF (TY4B with tall jump up fittings)

**ABBREVIATIONS LEGEND**

- FS = Finished Surface Level
- IL = Invert Level
- TW = Top of Retaining Wall (Levels with no Prefix are Existing Surface Levels)
- EP = End of Pipe
- TP = Tangent Point
- IP = Intersection Point
- TY = Property Connection Type
- F = Tall jump up Property Connection
- BT = Boundary Trap Lot (indicate Boundary Trap Lots after TY, eg: TY4S- BT)

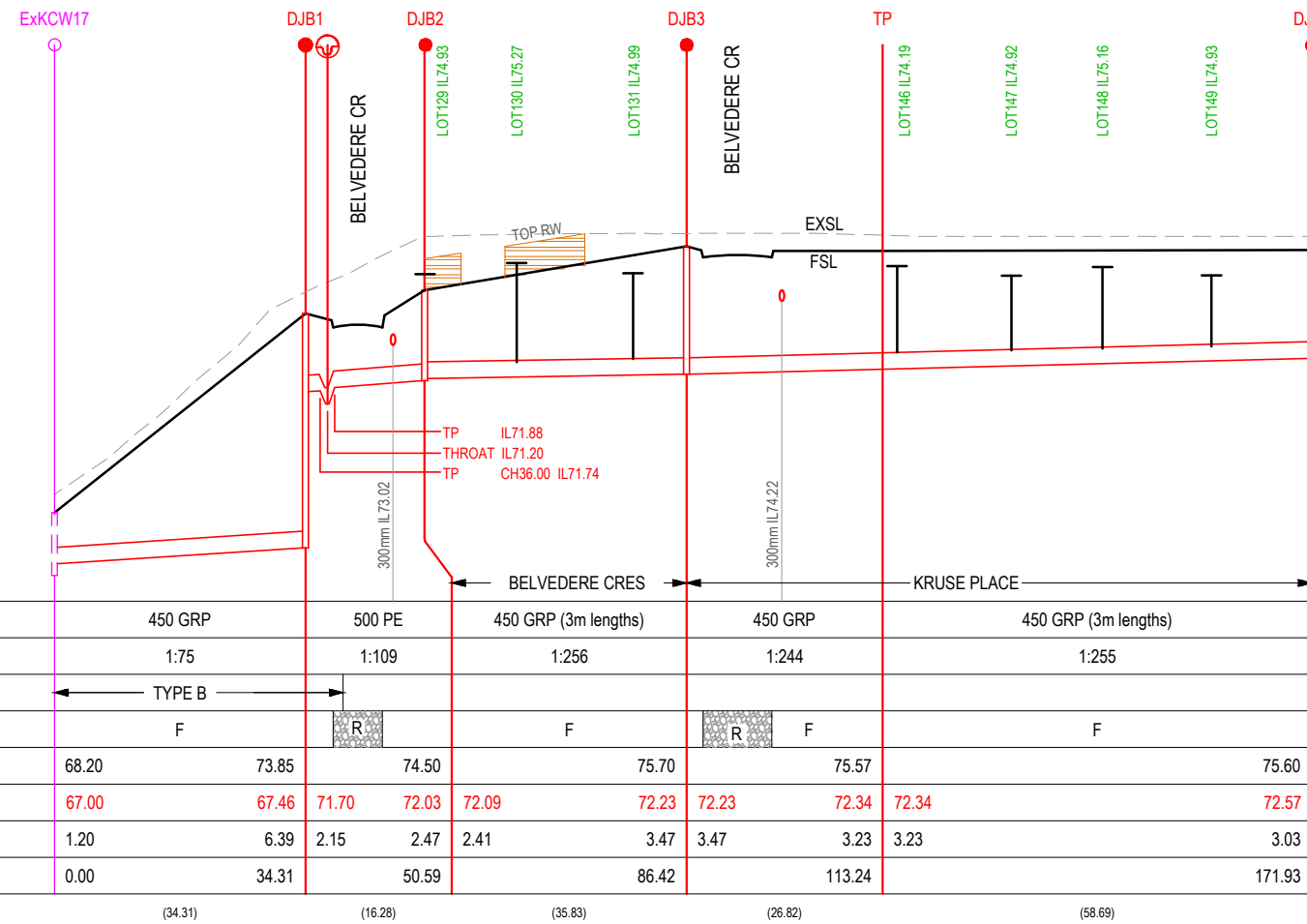
**COLOUR LEGEND**

- RED 10 SEWERAGE (NEW) INCLUDING NOTES
- GREEN 94 PROPERTY CONNECTION TEXT
- MAGENTA 210 EXISTING SEWERAGE
- ORANGE 32 RETAINING WALLS
- BLACK 0.13 STAGE LOT, ROAD BOUNDARIES, LOT No, ROAD NAMES, EASEMENTS.
- BLACK 0.35 PROPERTY CONNECTION PIPES
- GREY 252 EXISTING LOT & ROAD BOUNDARIES
- GREY 252 KERBS, FOOTPATHS, DRIVEWAYS, BOUNDARIES LEVELS AND BATTERS.
- GREY 252 DRAINAGE & OTHER SERVICES
- COLOUR 42 CONTOURS (1.0m INTERVAL)



**Notes to the Designer:**  
Aerial photograph inclusion in the design plan is optional and should only be included where it improves interpretation of the design and where all text and line work can be clearly observed.

**DETAIL PLAN**  
SCALE 1:500 @ A1



PIPE DETAILS	450 GRP		500 PE		450 GRP (3m lengths)		450 GRP		450 GRP (3m lengths)	
GRADE	1:75		1:109		1:256		1:244		1:255	
EMBEDMENT	TYPE B		R		F		R		F	
BACKFILL TYPE	F		R		F		R		F	
FINISHED SURFACE LEVEL	68.20	73.85	74.50	75.70	75.57	75.60				
INVERT LEVEL	67.00	67.46	71.70	72.03	72.09	72.23	72.23	72.34	72.34	72.57
DEPTH TO INVERT	1.20	6.39	2.15	2.47	2.41	3.47	3.47	3.23	3.23	3.03
CHAINAGE	0.00	34.31	50.59	86.42	113.24	113.24	113.24	113.24	113.24	171.93
LENGTH	(34.31)		(16.28)		(35.83)		(26.82)		(58.69)	

**LONGITUDINAL SECTION**  
SCALE 1:500 @ A1 HORIZONTAL  
SCALE 1:100 @ A1 VERTICAL

**Notes to the Designer:**

- While this template is primarily intended for linear asset projects such as Branch Sewers where reticulation connections are not included, it may also be used for smaller network projects where Plan and Long Section(s) can fit onto a single page.
- Trench sections as indicated in MRWA-S-101B are required to be shown somewhere within the Design Drawings.



**ISSUED FOR CONSTRUCTION**



**W.A.G. WARNING**  
HIGH PRESSURE OIL PIPELINE IN THE VICINITY

**WARNING**  
ABNORMAL VOLTAGES DETECTED

**NOTES TO THE DESIGNER:**

1. Remove W.A.G and ABNORMAL VOLTAGE WARNING if not relevant

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

REV	DESCRIPTION	DATE	APPROVED	REV	DESCRIPTION	DATE	APPROVED
1				3			
2				4			
3				5			
4				6			
5				7			
6				8			
7				9			
8				10			
9				11			
10				12			

DESIGNED: ABCDEFGH DATE: 11/22/3333	PROJECT NUMBER: 000000	Remove the irrelevant Water Agency Logos or turn off relevant layer MRWA-LOGO-CWW MRWA-LOGO-SEW MRWA-LOGO-YVW MRWA-TEXT-OFF		SCALE: AS SHOWN @A3
DRAWN: ABCDEFGH DATE: 11/22/3333	MELWAY REFERENCE: 123 A1			SHEET: 2 OF 5
CHECKED: ABCDEFGH DATE: 11/22/3333	AUTHORISED: ABCDEFGH DATE: 11/22/3333			DRAWING No.: MRWA-S-102
Insert Consultancy name and logo here			YARRA VALLEY WATER MUNICIPALITY PROJECT TITLE	REV: 0
PLAN AND LONGITUDINAL SECTION				