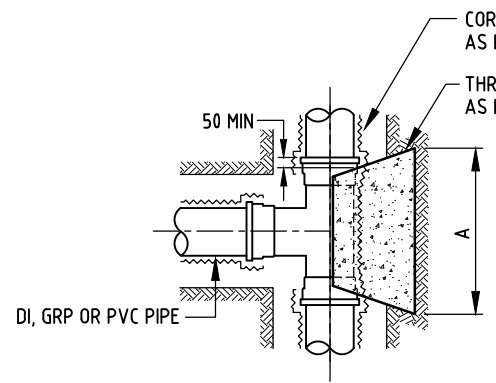
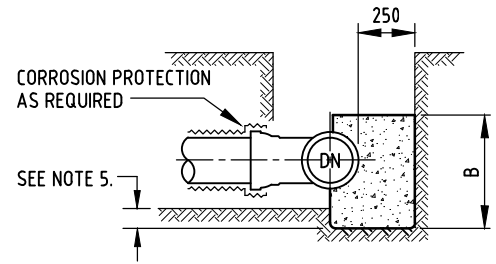


REFER TO W1-2-05B FOR MINIMUM THRUST BLOCK AREA m² - TABLES & OTHER DETAILS

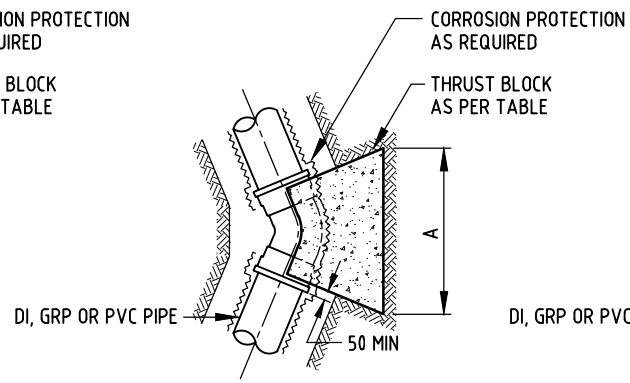


PLAN

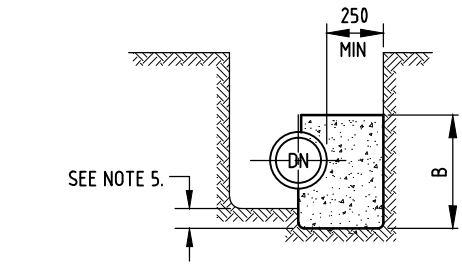


ELEVATION

THRUST BLOCK FOR TEES
(FOR HORIZONTAL THRUST)

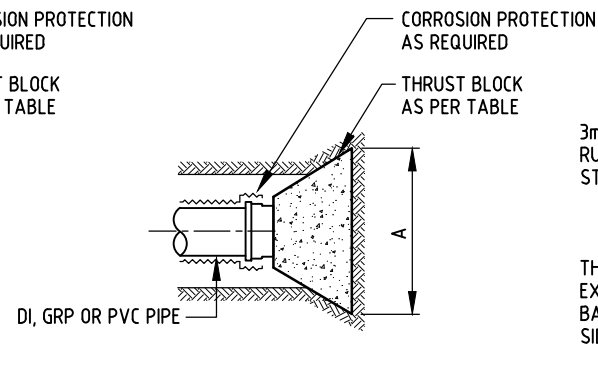


PLAN

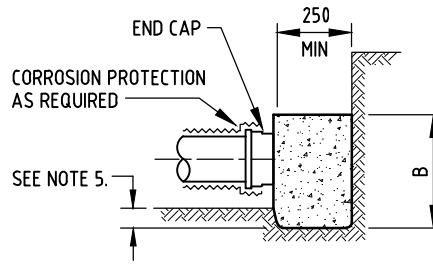


ELEVATION

THRUST BLOCK FOR BENDS
(FOR HORIZONTAL THRUST)

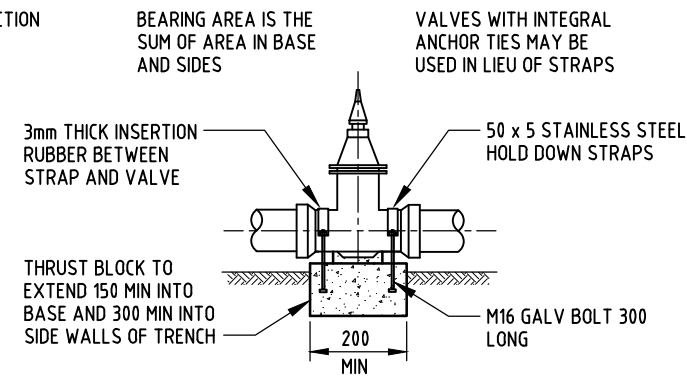


PLAN

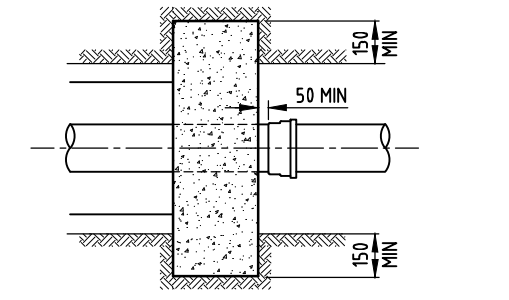


ELEVATION

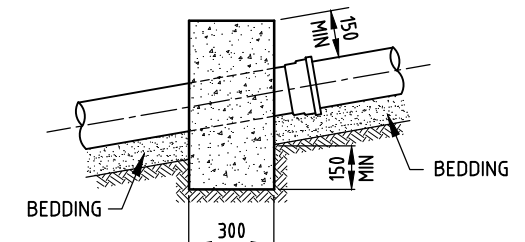
THRUST BLOCK FOR DEAD ENDS
(FOR HORIZONTAL THRUST)



VALVES WITHOUT SEPARATE IN-LINE ANCHORAGE
(FOR HORIZONTAL THRUST)



PLAN



ELEVATION

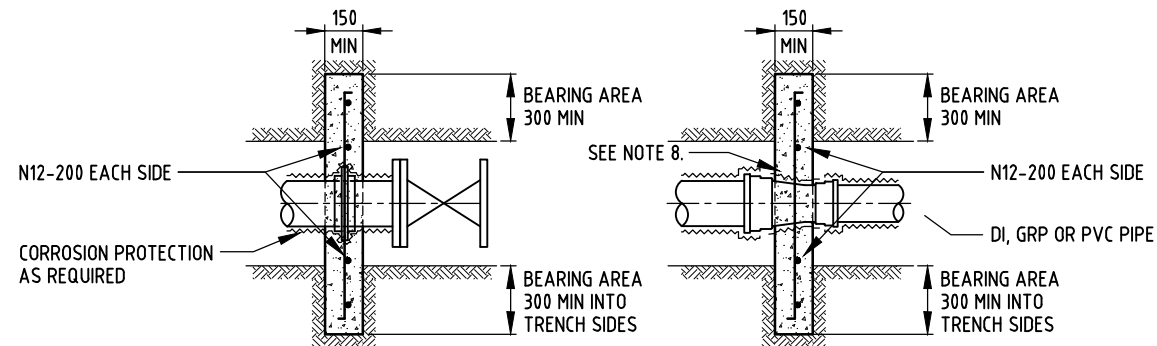
GRADIENT ANCHOR BLOCKS
(SLOPE OF 1:6 OR STEEPER)
(REFER ANCHOR BLOCK SPACING TABLE)

GRADIENT	MAX. SPACING (m)
1:2	6
1:3	11
1:4	13
1:5	17
1:6	22

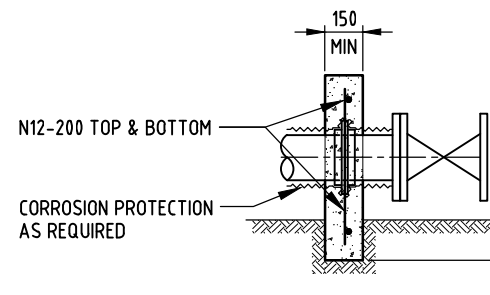
ANCHOR BLOCK SPACING

NOTES

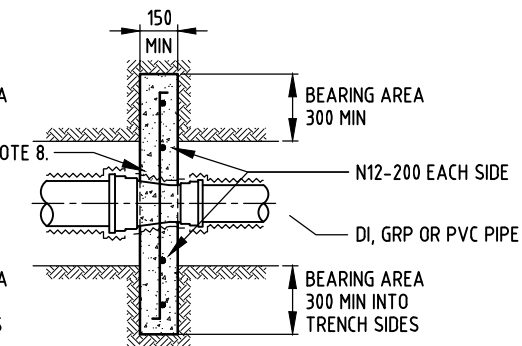
- ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES.
- DESIGN PRESSURES OTHER THAN 1200 kPa REDUCE OR INCREASE THE MINIMUM THRUST AREA BY THE RATIO OF THE DESIGN PRESSURES EXCEPT WHERE THE MINIMUM THRUST AREA IS > 0.1 m².
- DESIGN PRESSURES OTHER THAN 1200 kPa REDUCE OR INCREASE THE MINIMUM ANCHOR BLOCK VOLUME TO SUIT PRESSURE.
- FINISH THRUST BLOCKS APPROXIMATELY 100mm ABOVE THE TOP OF THE FITTING OR BEARING PAD AND EXTEND TO THE FLOOR OF TRENCH OR DEEPER IF NECESSARY TO ACHIEVE THE REQUIRED THRUST AREA. MAXIMUM ENCASEMENT TO BE 180°.
- THE MINIMUM THRUST AREA FOR IN-LINE TAPER THRUST BLOCKS TO BE EQUAL TO THE DIFFERENCE BETWEEN THE THRUST AREAS FOR DEAD ENDS OF EQUIVALENT DIAMETER TO THOSE EACH SIDE OF TAPER.
- FOR DOWNWARDS VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR THE VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
- WHEN SETTING DUCTILE IRON PIPES AND FITTINGS IN CONCRETE, THEY SHALL BE EXTERNALLY PROTECTED WITH TWO THICKNESSES OF BLUEBOSS POLYETHYLENE SLEEVING OR EQUIVALENT TO AS.3680 PLACED BETWEEN FITTINGS AND THRUST BLOCKS.
- WHEN SETTING PVC PRESSURE PIPES IN CONCRETE A COMPRESSIBLE MEMBRANE OF CLOSED CELL FOAM OR FELT SHALL SURROUND THE PIPE AND FITTING TO PERMIT PIPE MOVEMENT IN THE CONCRETE.
- CONCRETE FOR THRUST AND ANCHOR BLOCKS SHALL BE CLASS N25 IN ACCORDANCE WITH AS.1379 AND AS.3600.
- THRUST BLOCKS ARE TO BE FORMED WITH A MINIMUM CLEARANCE OF 50mm FROM SOCKETS. LEAVE SUFFICIENT SPACE AT FLANGED JOINTS FOR FUTURE DISMANTLING OF JOINTS.
- FOR LONGITUDINAL ANCHOR BLOCKS ON DUCTILE IRON OR STEEL PIPE USE FACTORY FITTED PUDDLE FLANGES.
- IN-LINE THRUST BLOCKS FOR TAPERS, TEMP. END STOPS AND VALVES DN150 OR LESS ONE STEEL BAR REINFORCEMENT CAGE & GREATER THAN DN225 TO DN300 TWO STEEL BAR REINFORCEMENT CAGES.
- THRUST BLOCK SIZE FOR PIPES LARGER THAN DN300 WILL NEED TO BE CALCULATED BY THE CONSULTING ENGINEER.
- THRUST BLOCKS ARE TO BE FORMED USING PLY. SAND BAGS CAN BE USED TO HOLD FORM WORK IN PLACE.



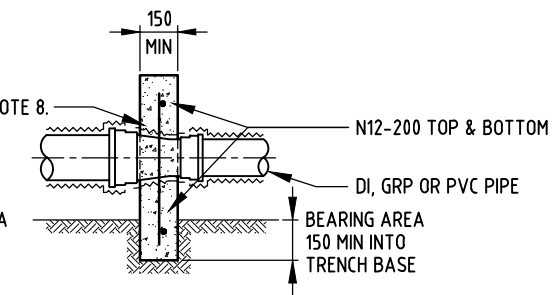
PLAN



ELEVATION



PLAN



ELEVATION

IN-LINE THRUST BLOCKS FOR TAPERS, TEMP. END STOPS AND VALVES
(FOR HORIZONTAL THRUST)

NO	DESCRIPTION	DRN	DATE	CKD	APPD
3	GENERAL AMENDMENTS 2021.	PW	JUNE '21	IL	DC
2	REDRAWN IN AUTOCAD.	AW	OCT '18	JR	DC
1	TRENCH DETAILS DELETED. ANCHOR BLOCK SPACING CHANGED.	AW	JUN '11	RJ	JP
AMENDMENTS					



DES	DRN	ME	WATER STANDARD DRAWING		
CHK	APPD	N.T.S.	MAINLAYING		
SCALE	ISSUED	DEC '88	THRUST AND ANCHOR BLOCK DETAILS		
ALL DIM. IN mm	DRAFTING STANDARD TO A.S.1100	A3	DRAWING NUMBER	W1-2-05A	3
			CAD PRODUCT - DO NOT AMEND MANUALLY		
			AMDT		