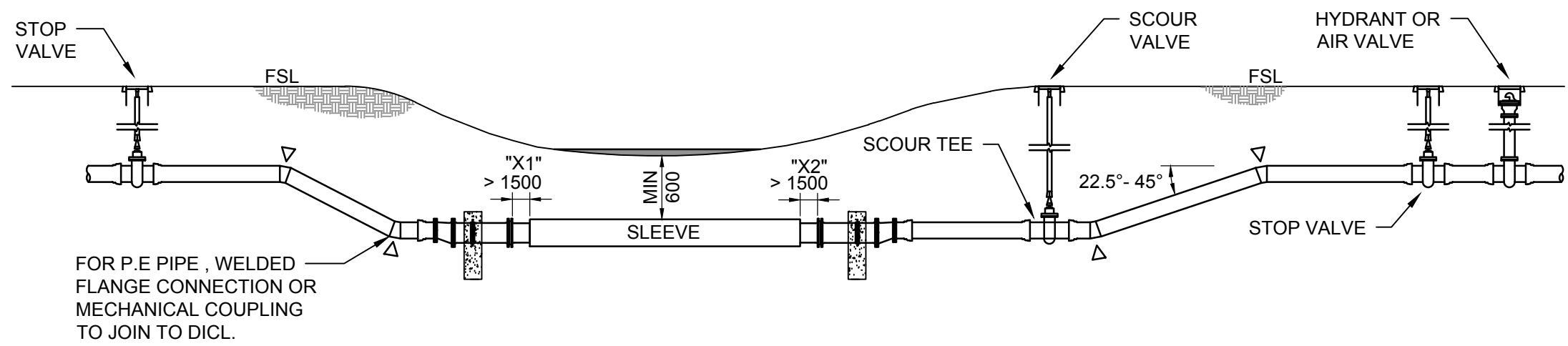
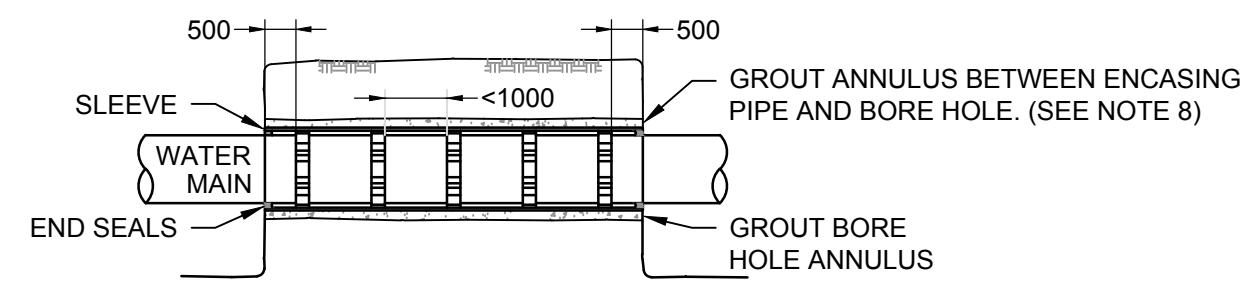


EXTEND SLEEVE PAST KERB OR TABLE DRAIN ON BOTH SIDES

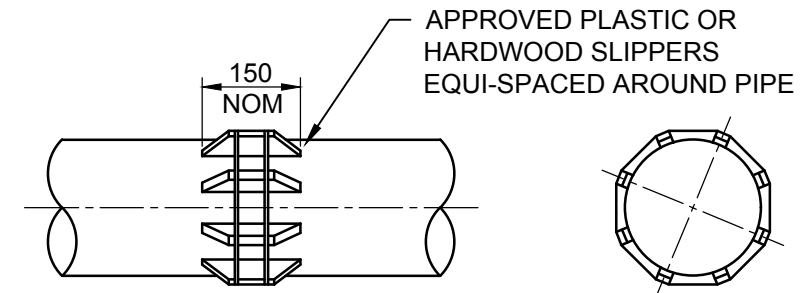
DETAIL A: SECTION VIEW ROAD CROSSING



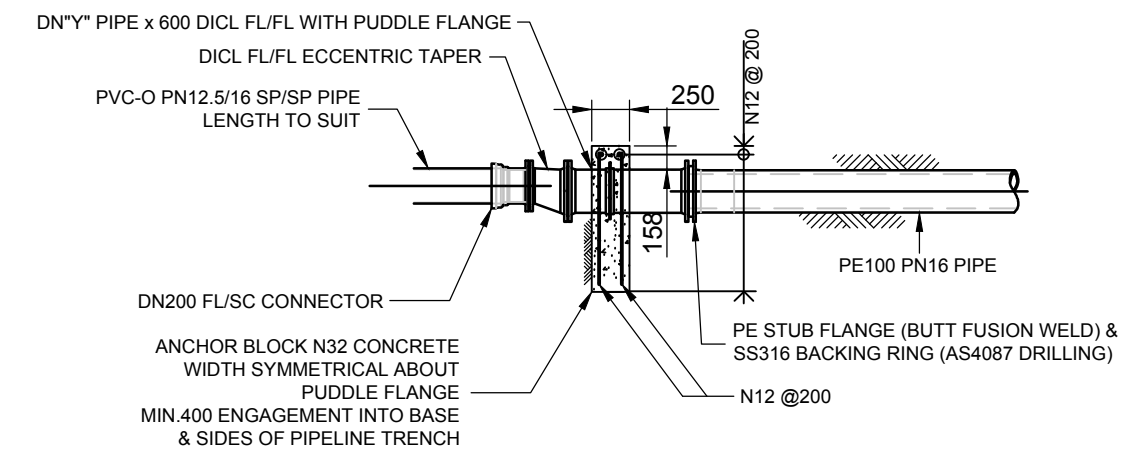
DETAIL B SECTION VIEW, WATERWAY CROSSING



DETAIL C TYPICAL SLEEVE INSTALLATION



DETAIL D WATERMAIN SUPPORTS DETAIL



ELEVATION  
TYPICAL THRUST RESTRAINT DETAIL FOR PE INSTALLATION

- NOTES**
- ALL DIMENSIONS ARE IN MILLIMETERS.
  - METHODS OF INSTALLATION TO BE AS SHOWN IN DESIGN DRAWINGS OR AS DIRECTED BY THE WATER AGENCY OR ROAD OWNER. DIFFICULT CONDITIONS MAY REQUIRE SPECIAL ARRANGEMENTS REFER TO ARC ENGINEERING CODE
  - HORIZONTAL BORING**  
ENCASING PIPE  
- RC CLASS 4 OR  
- STEEL (BARE) PIPE. WALL THICKNESS TO BE AS SPECIFIED IN THE DESIGN DRAWINGS OR GRP.  
WATER PIPE  
- PE CLASS PN 16
  - JACKING**  
ENCASING PIPE  
REINFORCING CONCRETE CLASS 4 BUTT JOINED WITH STEEL LOCATING BANDS, STEEL OR GRP JACKING PIPE.  
WATER PIPE  
- PE CLASS PN 16
  - Ø100 AND Ø150 MAY BE INSTALLED WITHOUT A SLEEVE FOR BORES NO LONGER THAN 15m AND WITH BORE HOLES NO LARGER THAN 150mm FOR DN125, 200mm FOR DN180.
  - WATER MAIN BORES TO BE INSTALLED AT A CONSTANT GRADE, BORE LOGS WITH A MINIMUM 4 POINTS REQUIRED TO CONFIRM.
  - DIMENSIONS "X1" & "X2" AND LOCATION OF BULKHEADS & REINFORCING TO BE SHOWN IN DESIGN DRAWINGS.
  - FILL VOID BETWEEN BORED HOLE AND CASING PIPE WITH GROUT AS SHOWN ON SEW-1403. GROUTING MIX TO BE 1:1 (SAND:CEMENT) WITH A WATER:CEMENT RATIO 1:0.67 BY WEIGHT USING FINE WELL ROUNDED SAND. PLASTICISERS MAY BE USED.
  - REFER TO ARC STD DWG 020-027/1 FOR SCOUR DETAILS.

<p><b>Armidale</b> Dept of Public Infrastructure Regional Council</p>	SCALES NTS	APPROVED M. WILSON MANAGER ENGINEERING AND STANDARDS SUPPORT 20/12/2017 DATE	SHEET 1 OF 1	
	BORED WATERMAIN ROAD AND CREEK CROSSING DETAILS		DRAWING No <b>020-044</b>	
			AS SHEET SIZE <b>A3</b>	AMDT No <b>A</b>
			CADFILE 020-044.dwg	DATE 20/12/2017