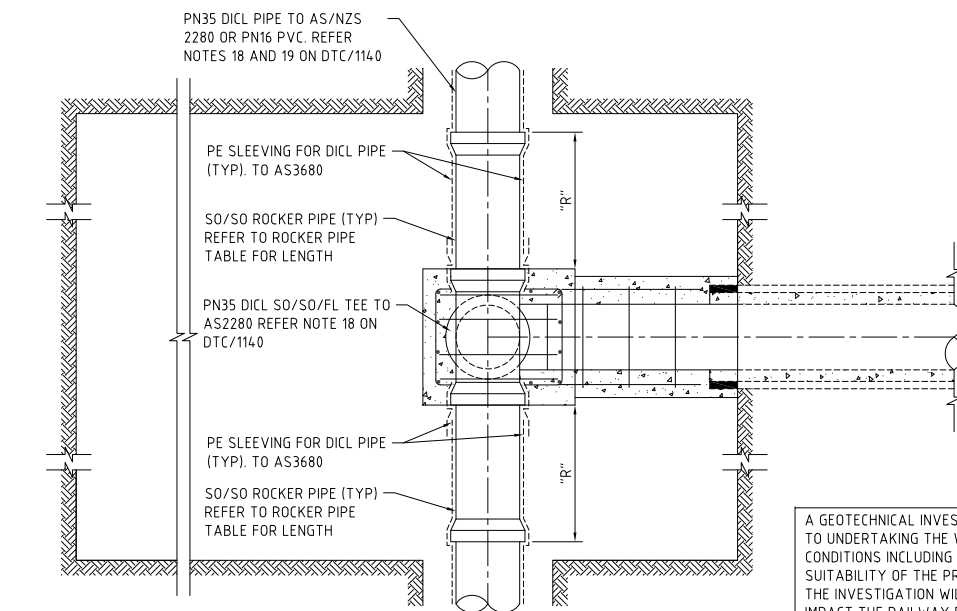
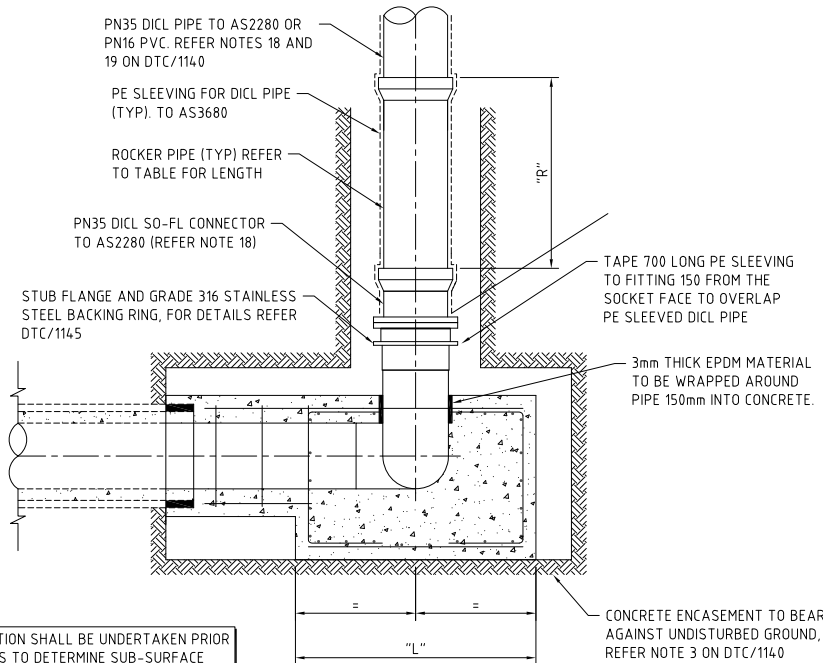


NOTES:

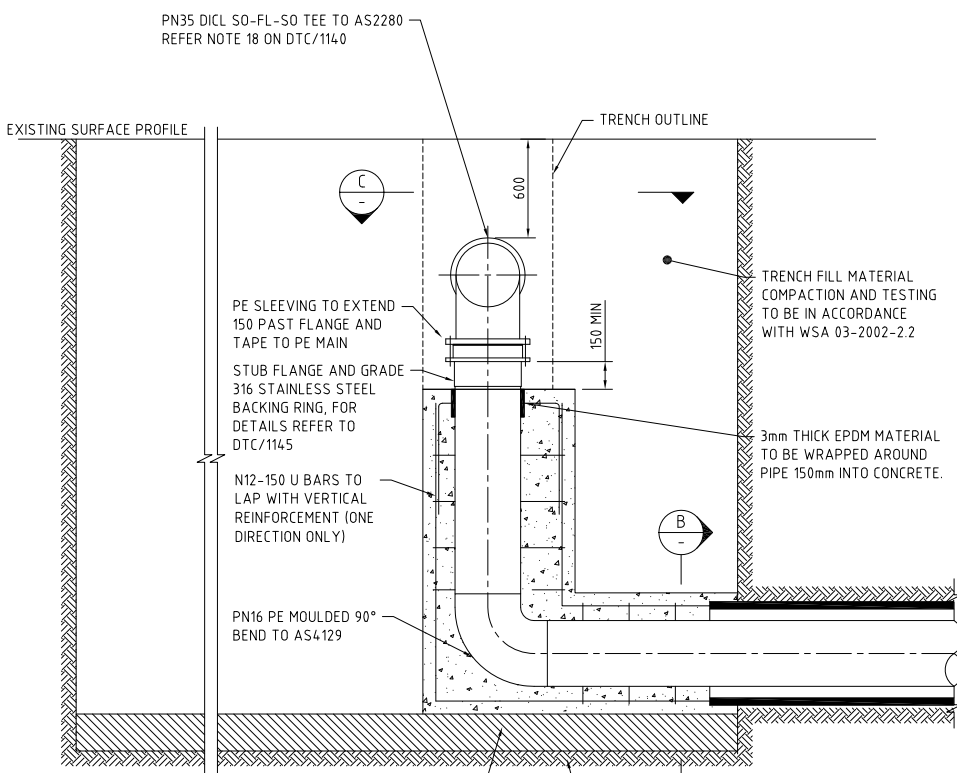
- THIS DRAWING TO BE READ IN CONJUNCTION WITH DTC/1140.



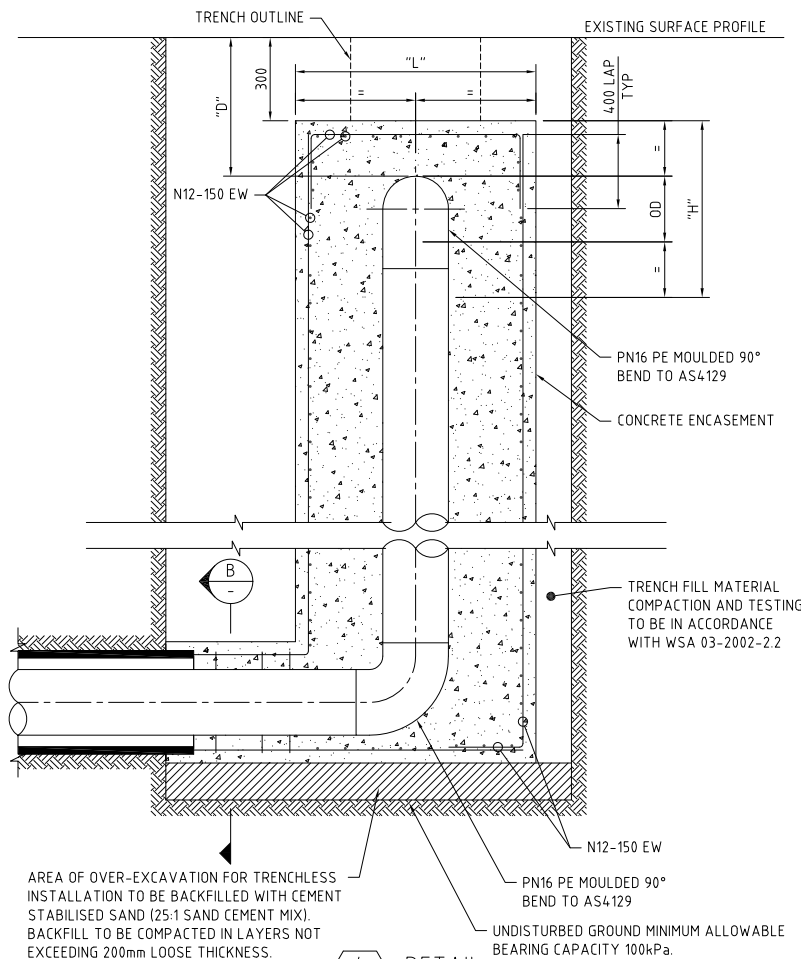
1 DETAIL
Sh1 SCALE 1:20



2 DETAIL
Sh1 SCALE 1:20



3 DETAIL
Sh1 SCALE 1:20



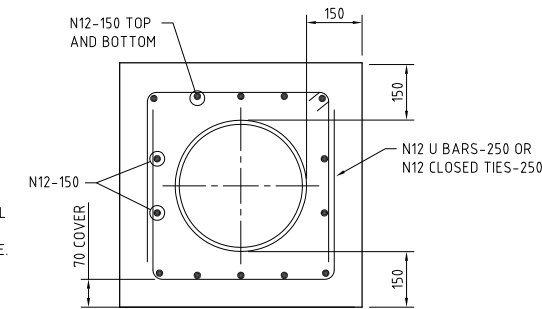
4 DETAIL
Sh1 SCALE 1:20

AREA OF OVER-EXCAVATION FOR TRENCHLESS INSTALLATION TO BE BACKFILLED WITH CEMENT STABILISED SAND (25:1 SAND CEMENT MIX). BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 200mm LOOSE THICKNESS.

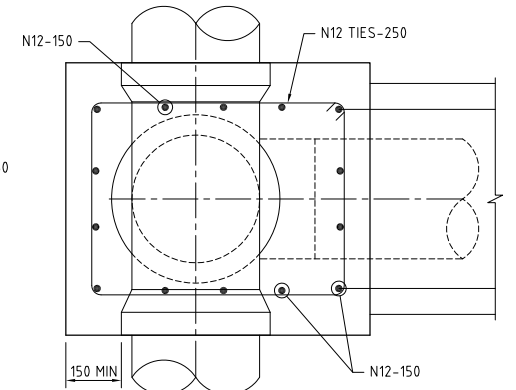
UNDISTURBED GROUND MINIMUM ALLOWABLE BEARING CAPACITY 100kPa.

AREA OF OVER-EXCAVATION FOR TRENCHLESS INSTALLATION TO BE BACKFILLED WITH CEMENT STABILISED SAND (25:1 SAND CEMENT MIX). BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 200mm LOOSE THICKNESS.

UNDISTURBED GROUND MINIMUM ALLOWABLE BEARING CAPACITY 100kPa.



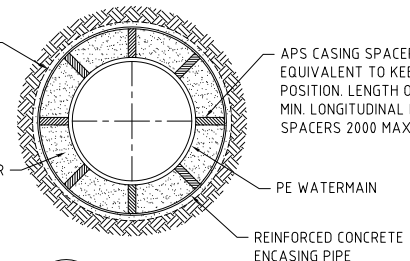
B SECTION
SCALE 1:10



C SECTION
SCALE 1:10

ANNULUS BETWEEN INSIDE FACE OF BORE AND OUTSIDE FACE OF ENCASING PIPE NOT TO EXCEED 25mm.

GROUT ANNULUS BETWEEN WATER MAIN AND ENCASING PIPE. REFER NOTE 13 ON DTC/1140.



D SECTION
Sh1 SCALE 1:10

ROCKER PIPE DIMENSIONS		
PIPE SIZE (DN)	"R" MIN	"R" MAX
150	300	450
200	400	600
250	500	750
300	600	900

PIPE DIMENSIONS		
DICL PIPE SIZE (DN)	PE PIPE OUTSIDE DIAMETER (OD)	ENCASING PIPE Ø (OD)
150	180	300
200	200	350
250	280	400
300	315	450

THRUST ANCHOR BLOCK DETAILS FOR 90° BEND

BRANCH DN	BRANCH OD	TEST PRESSURE HEAD	THRUST T	SOIL AHBP	REQUIRED BEARING AREA	"D" MIN	"H" MIN	"L" MIN
(mm)	(mm)	(m)	(kN)	(kPa)	(m²)	(mm)	(mm)	(mm)
150	177	150	37	50	0.74	600	780	1000
150	177	150	37	100	0.37	600	780	800
150	177	150	37	200	0.18	600	780	800
200	232	150	63.4	50	1.27	900	1430	950
200	232	150	63.4	100	0.63	600	830	850
200	232	150	63.4	200	0.32	600	830	850
250	286	150	96.4	50	1.93	1200	2090	950
250	286	150	96.4	00	0.96	800	1290	900
250	286	150	96.4	200	0.48	600	890	900
300	345	150	140.3	50	2.80	SPECIAL DESIGN REQUIRED		
300	345	150	140.3	100	1.40	900	1550	950
300	345	150	140.3	200	0.70	600	950	950

Sydney
WAT

C COPYRIGHT
STATE OF NEW SOUTH WALES THROUGH SYDNEY
WATER CORPORATION. ALL RIGHTS RESERVED

APPROVED

PETER GILLMAN
MANAGER E & ES

A
LETTER

ORIGINAL ISSUE
DETAILS OF ISSUE / AMENDMENT

PJG 01/03/13
APP'D DATE

DEEMED TO COMPLY DRAWINGS

**RAILWAY CROSSING - TRENCHLESS
PE WATER MAINS DN150 - DN300
SHEET 2 OF 2**

DTC
1141

ISSUE DATE
A 01/03/13