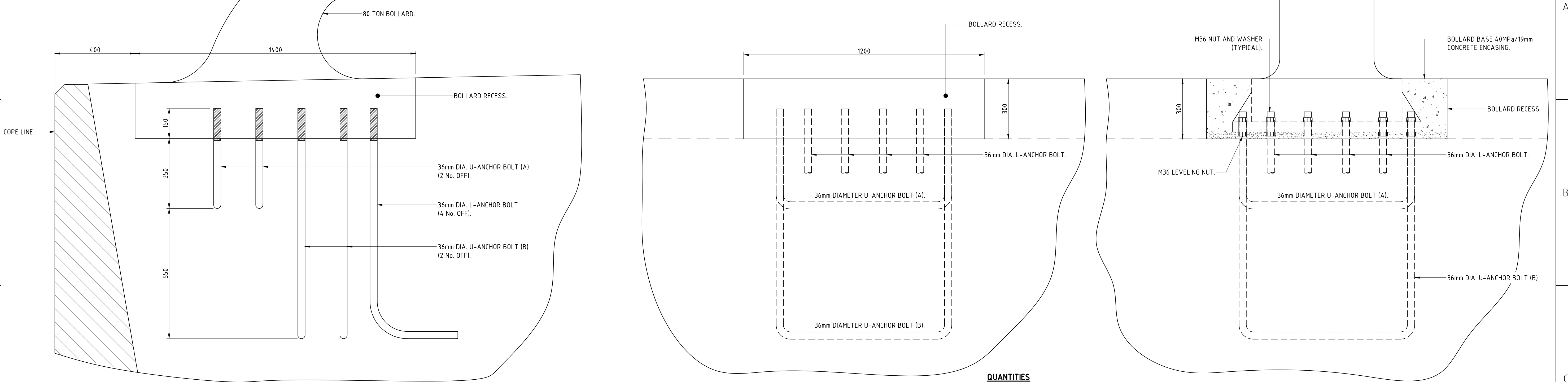


DO NOT SCALE - IF IN DOUBT, ASK

NOTE:

1. EXISTING QUAY 80t BOLLARDS TO BE RE-USED ON THE 202 BERTH EXTENSION, 2No. OFF IN TOTAL. .

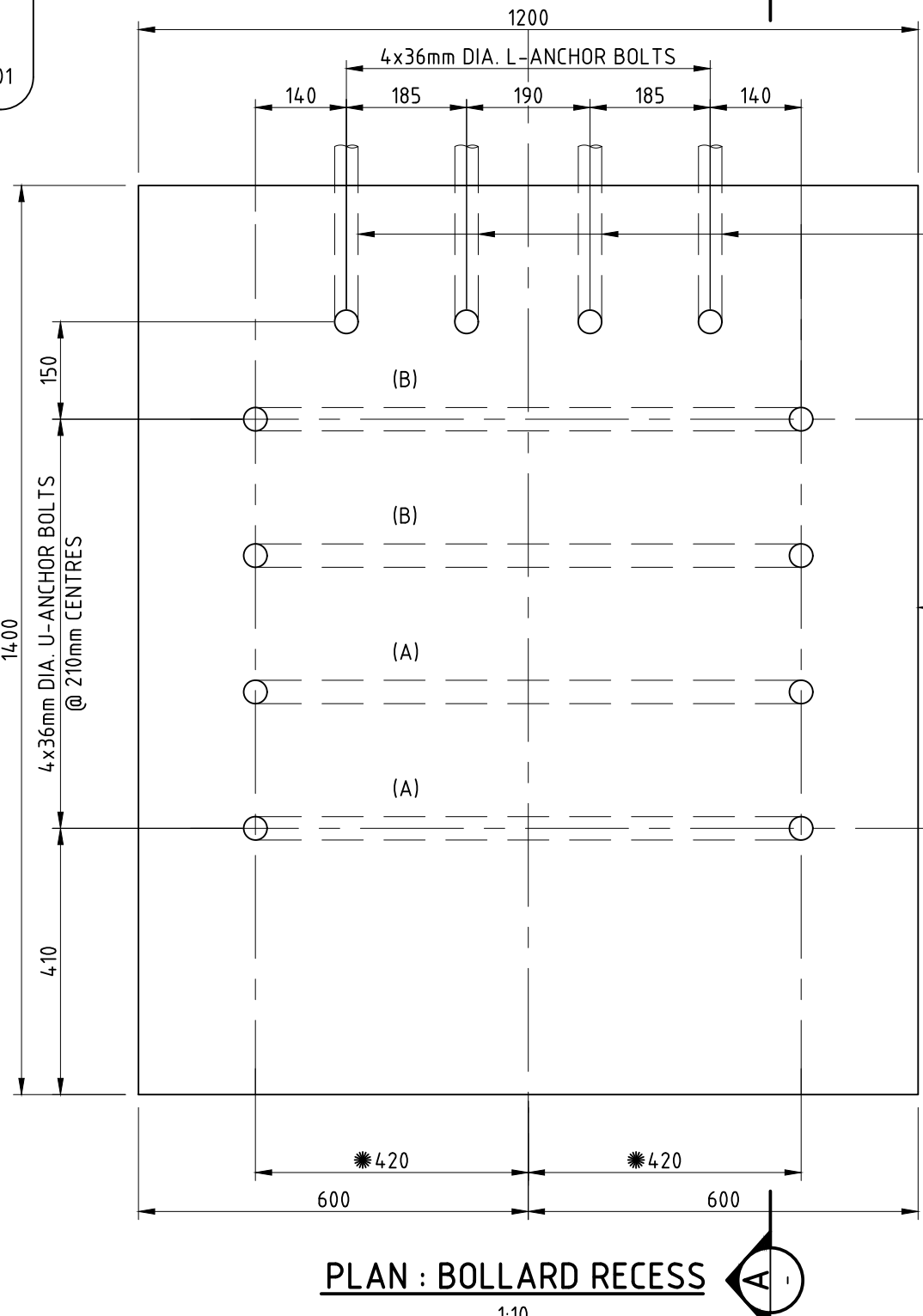
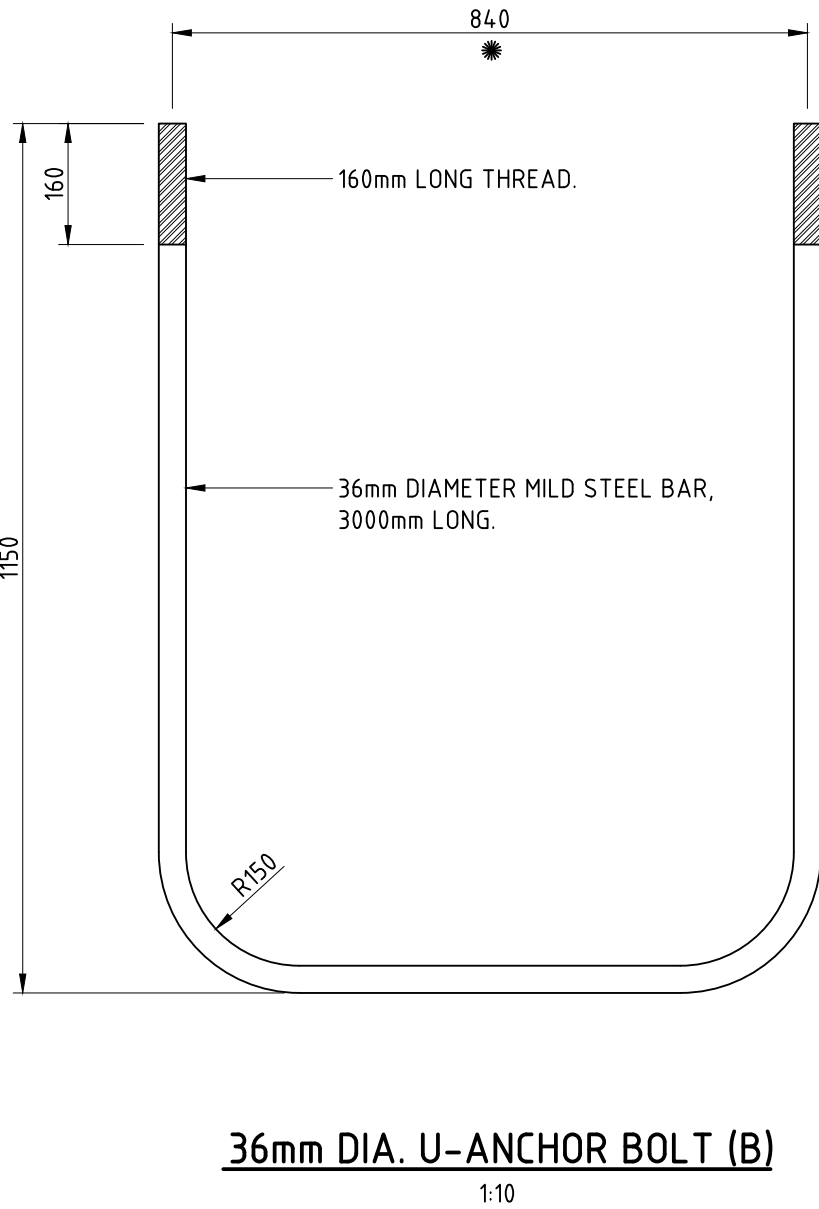
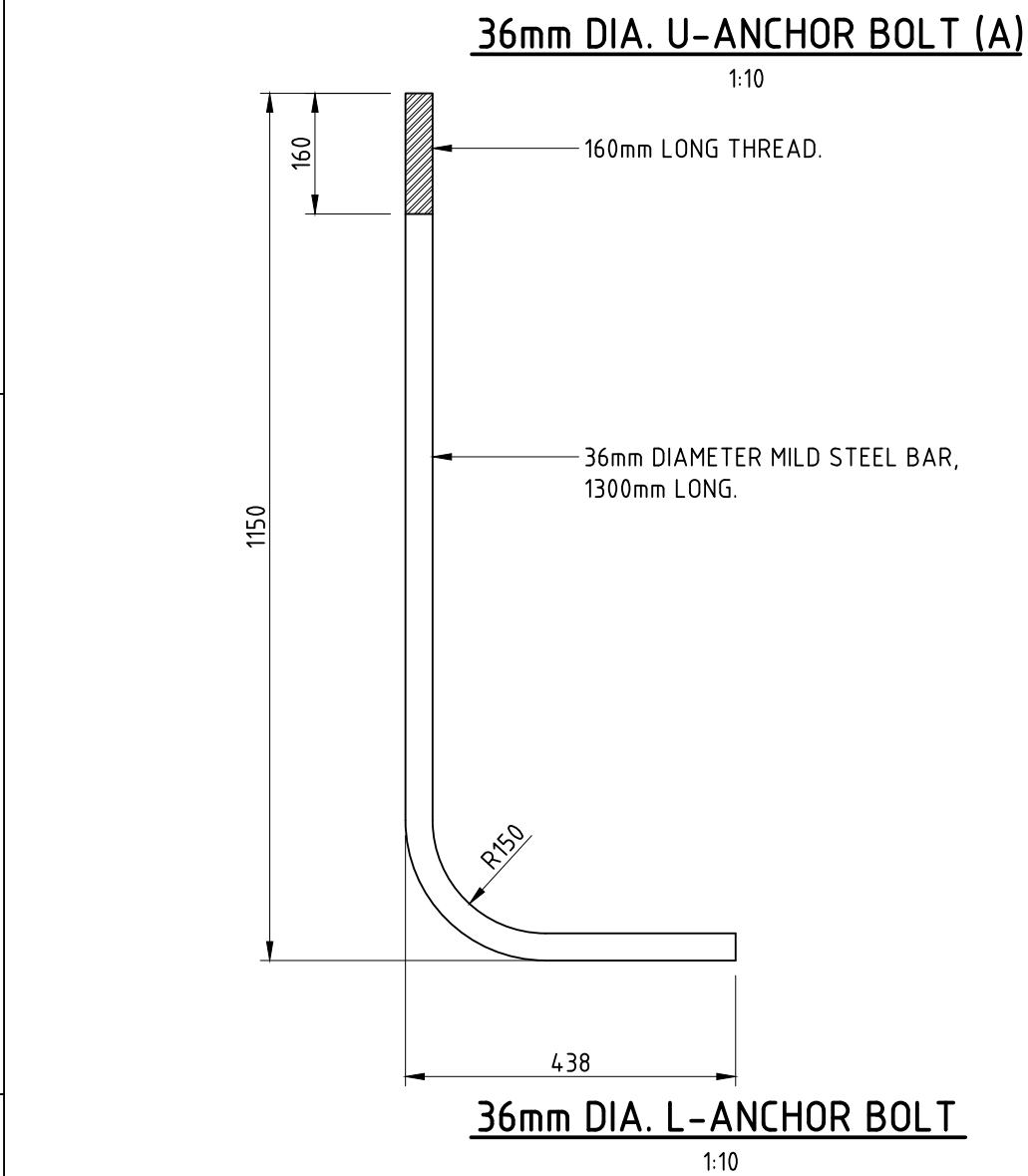
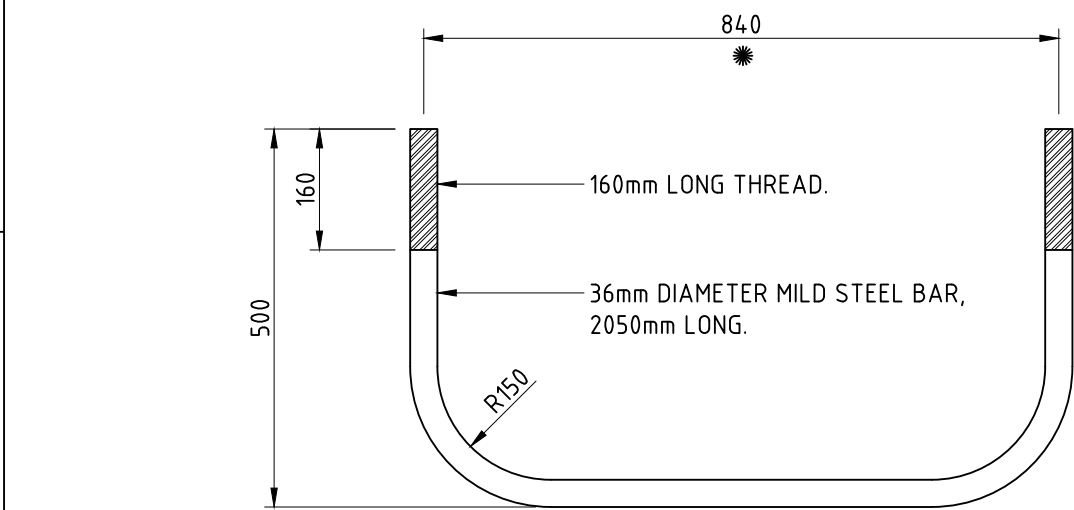


SECTION A

BOLLARD INSTALLATION

1. PLACE MORTAR BED IN FORM OF A SLIGHT MOUND TO PREVENT AIR BEING TRAPPED UNDER BOLLARD BASE.
2. LOWER BOLLARD ONTO LEVELING NUTS AND FASTEN DOWN.
3. PLACE CONCRETE TO ENCASE BOLLARD BASE
4. CLEAN BOLLARD BY WIRE BRUSHING AND APPLY TWO COATS OF APPROVED EPOXY TAR PAINT TO SANS 801

SECTION B

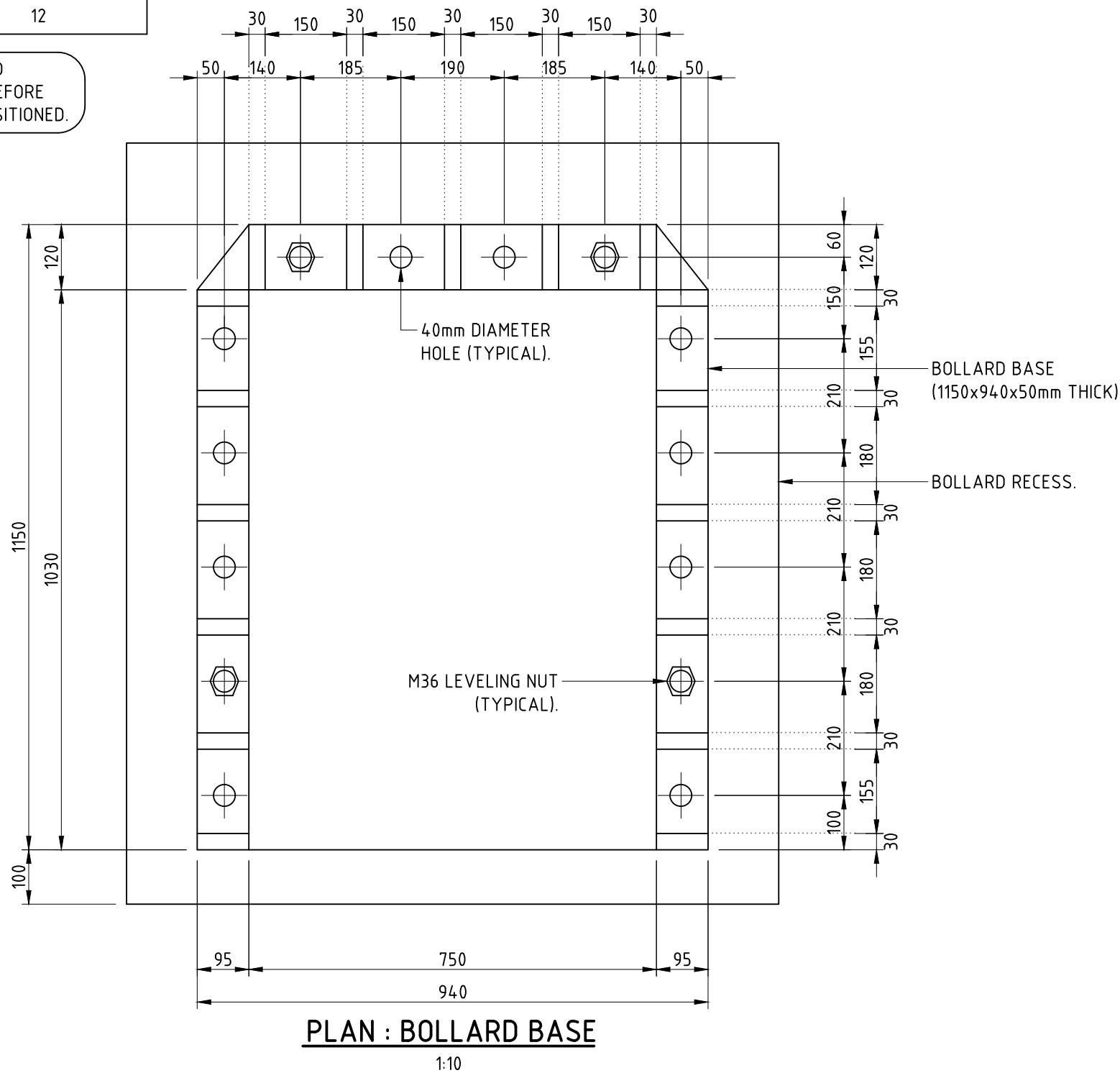


QUANTITIES

DESCRIPTION	No.OFF PER BOLLARD
36mm DIA. U-ANCHOR BOLT (A)	2
36mm DIA. U-ANCHOR BOLT (B)	2
36mm DIA. L-ANCHOR BOLT	4
M36 NUT - GRADE 4.6 (FOR LEVELING)	4
M36 NUT - GRADE 4.6	12
M36 WASHER - BLACK	12

- THESE DIMENSIONS MUST BE CHECKED AGAINST HOLES IN BOLLARD BASE BEFORE ANCHOR BOLTS ARE MADE UP OR POSITIONED

ELEVATION



Engineers		EPCM CONSULTANT: TNPA		ORIGINATOR: ZAA		Transnet National Ports Authority	
P O Box 26546 HOUT BAY 7872 Tel: +27(21) 791 9100 E-Mail: zaaepna@zaaepna.com		31 Melkhout Crescent Hout Bay 7806 Fax: +27(21) 790 4470		237 MAHATMA GANDHI ROAD DURBAN P.O. BOX 31683, DURBAN TEL: 031 361 8852		PORT OF DURBAN	
1785-CO-110-C-DWG-0002-03 DRAWING NO.		QUAY FURNITURE PHASE 3 (BERTH 203) REFERENCE		DCT BERTHS 203 to 205 RECONSTRUCTION DEEPENING AND LENGTHENING		QUAY FURNITURE BOLLARDS 80t	
REFERENCE DRAWINGS		PROJECT NO DIS CODE AREA DISP TYPE DRG NO SHEET STATUS REV		REG. NUMBER 760293		MANUFACTURING & INSTALLATION DETAILS	
1 7 8 5		C 0 1 1 0		C D W G 0 0 0 3		2 1 2 2 8 3 0 1	
1		2		3		4	