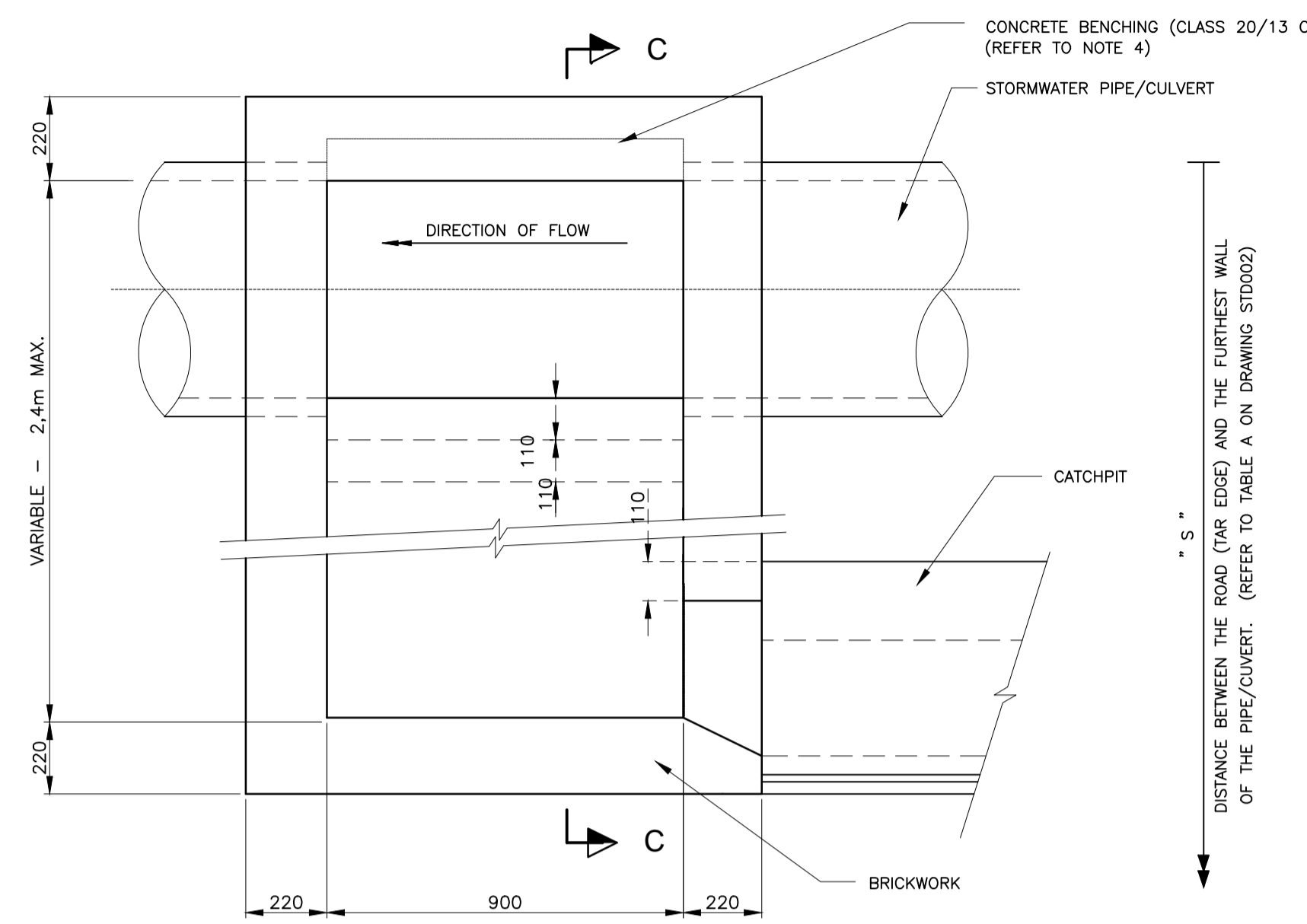
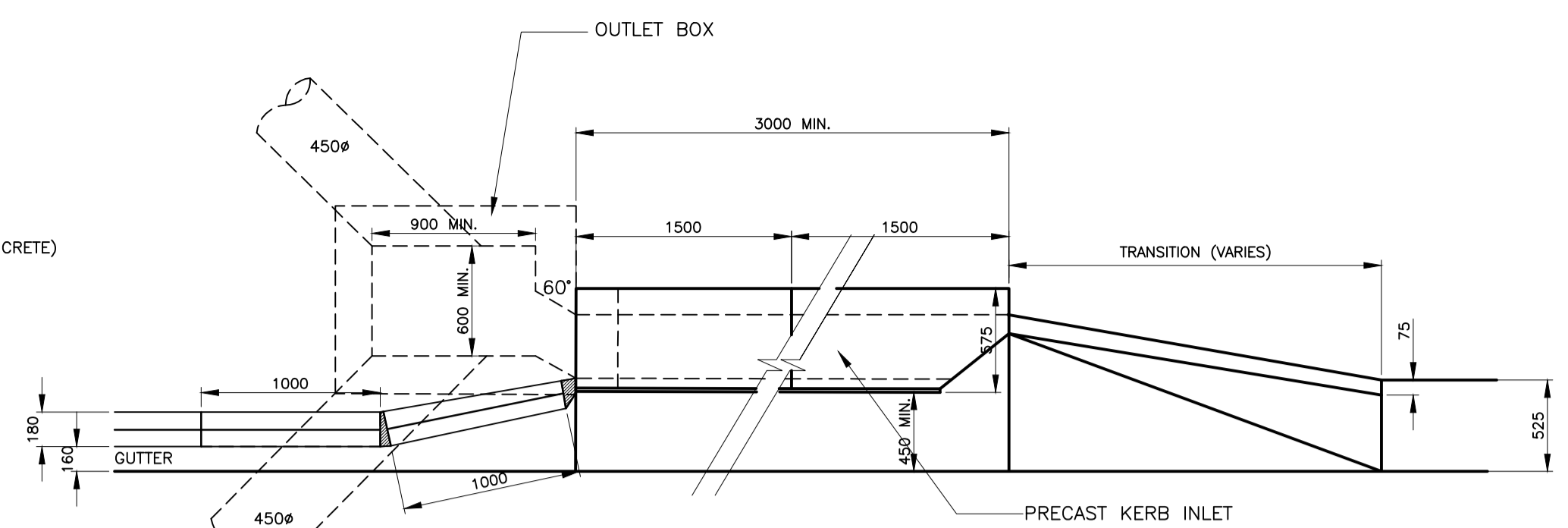


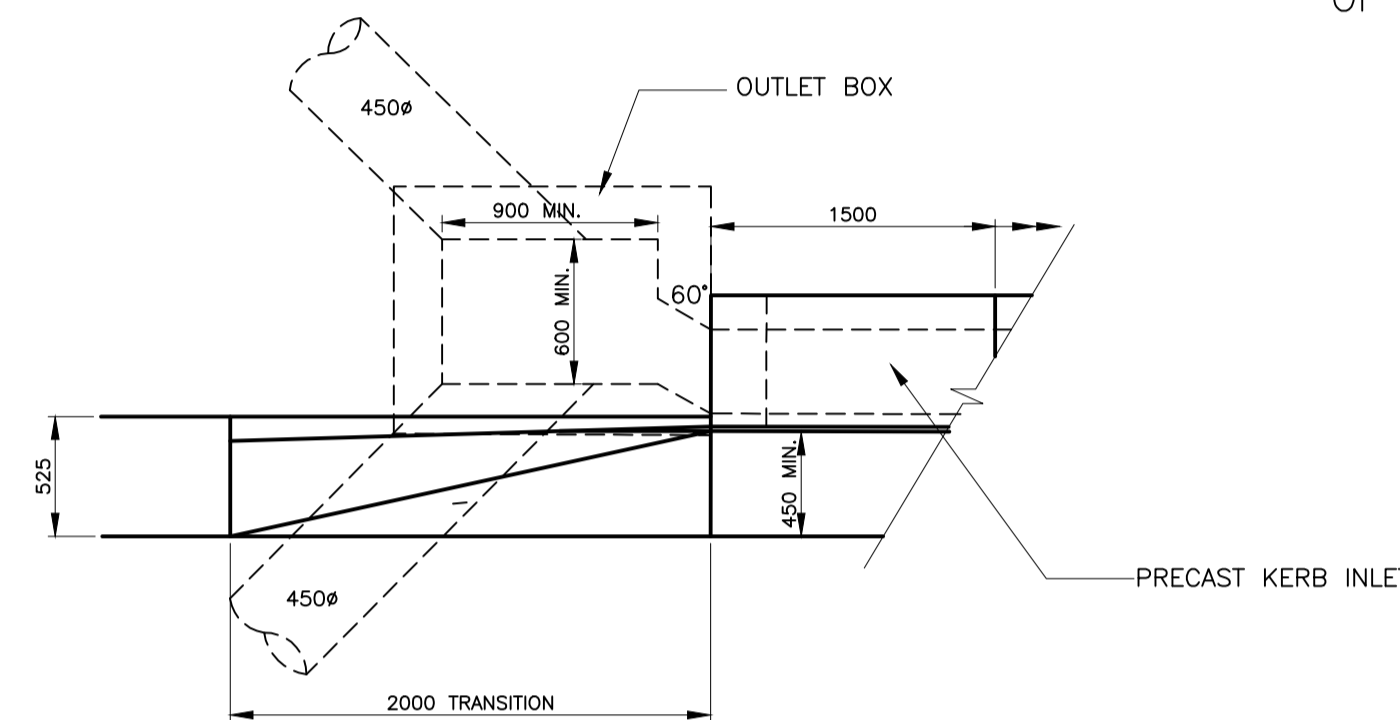
1. All stormwater pipes to be laid soffit to soffit
2. Minimum pipe diameter of all pipes is 450mm.
3. Maximum angle between adjoining pipes is 60°.
4. Where a pipe wall is at least 75mm from the nearest junction box wall, the concrete bencing can be started adjacent to the double brick wall.
5. Where the total depth of the junction box (invert level to finished ground level) exceeds 2,0m a structural design must be submitted by a professional engineer.
6. All bricks shall comply with SANS 227 and shall be engineering units of class FBS (face brick standard) with a nominal compressive strength of 12 MPA.
7. Also refer to Section 502 of the Standard Specifications for Municipal Civil Engineering Works, 3rd Edition, 2005.



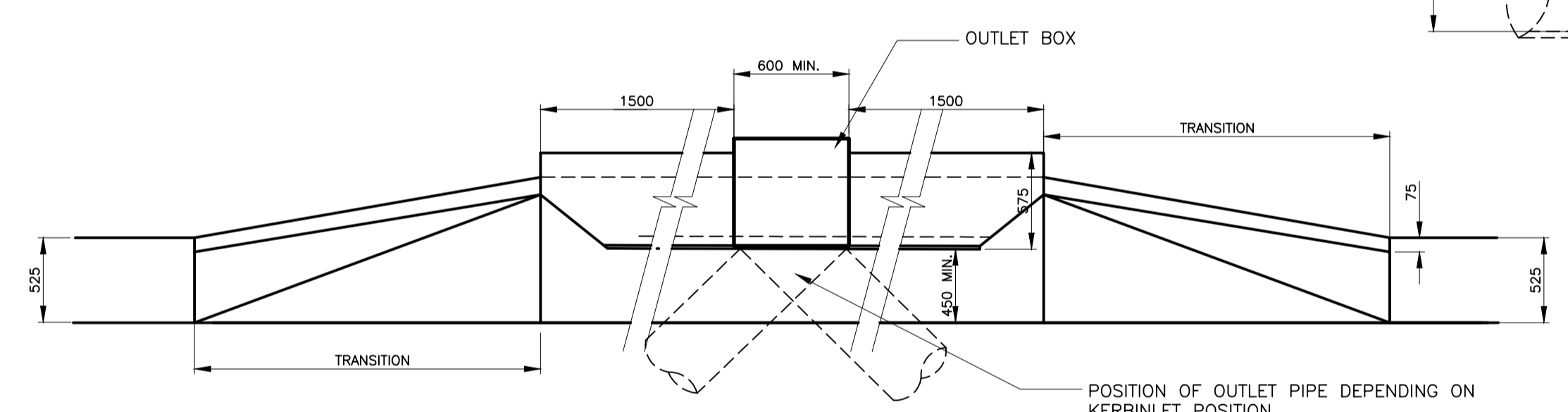
PLAN OF TYPE B JUNCTION BOX (WITHOUT COVER SLAB)



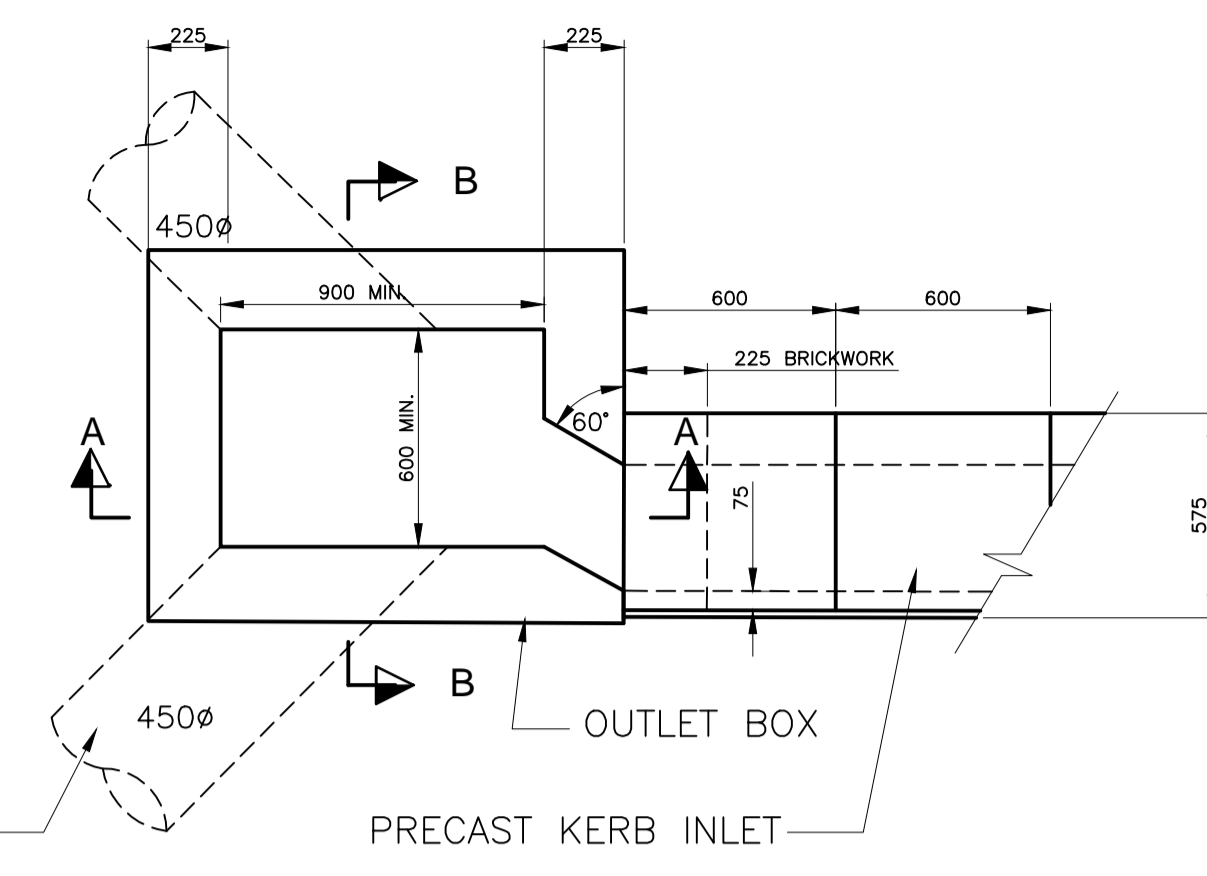
PLAN OF KERB INLET SHOWING OUTLET BOX POSITION UNDER VERTICAL KERB



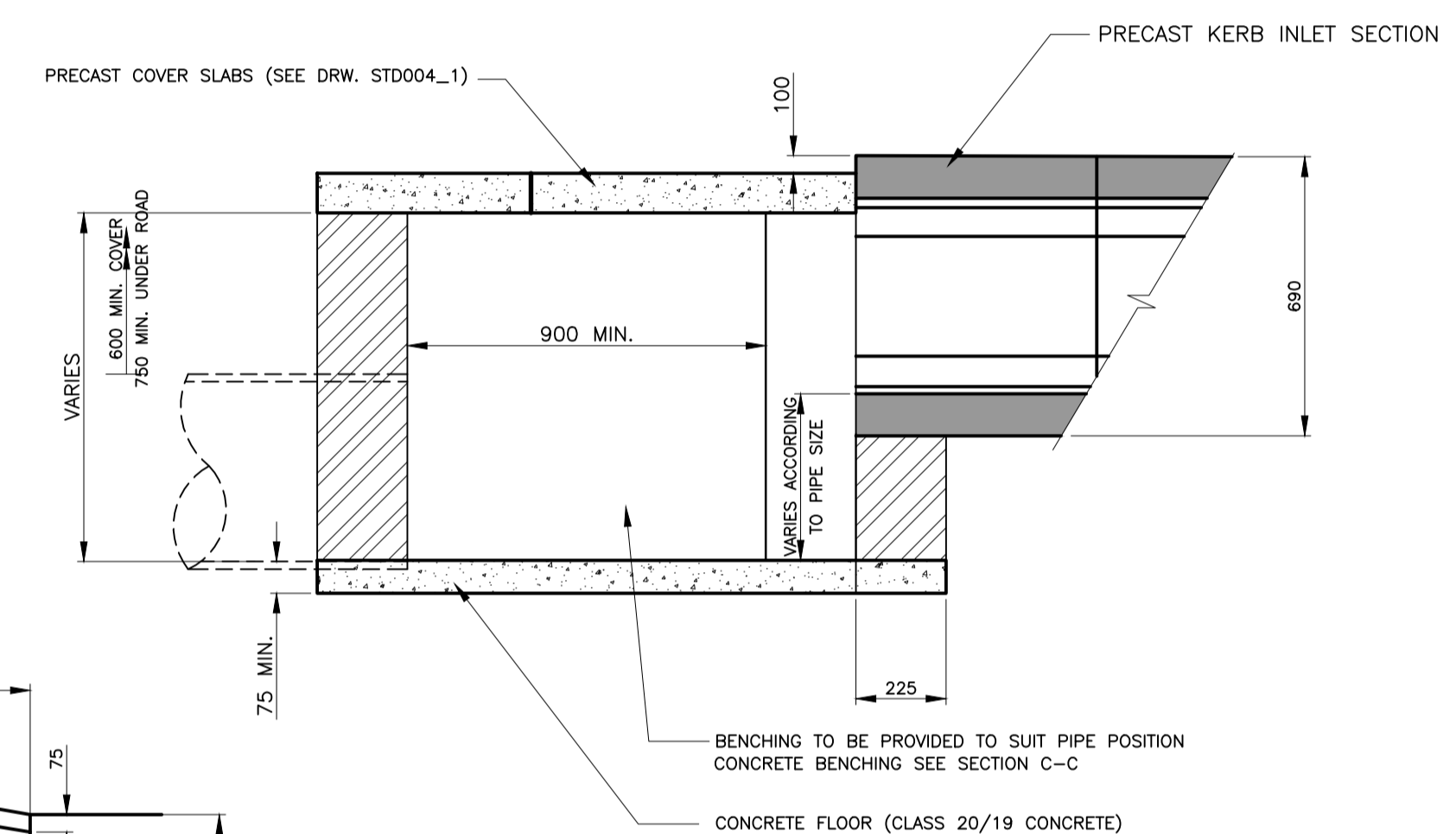
PLAN OF KERB INLET SHOWING OUTLET BOX POSITION UNDER SLOPING KERB



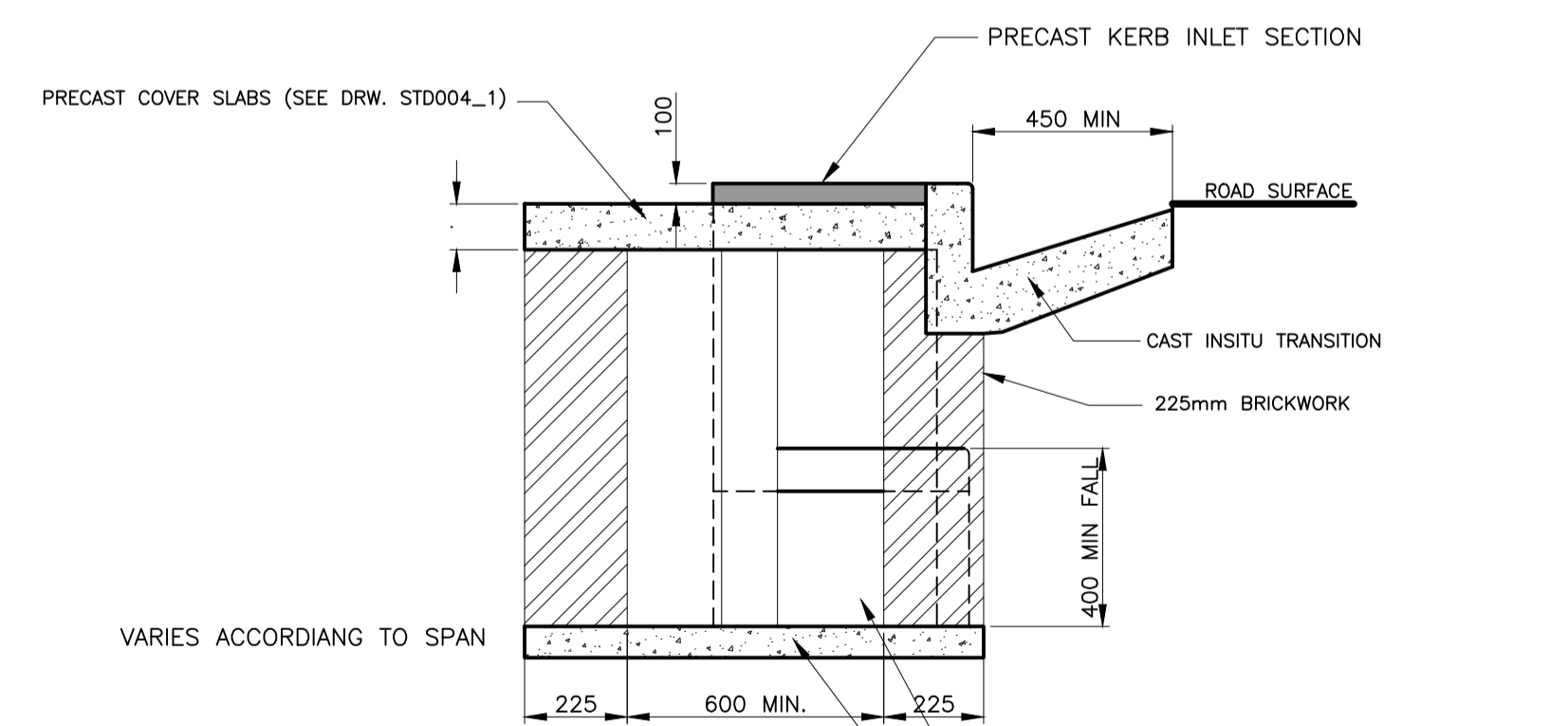
PLAN OF KERB INLET AT A LOW POINT SHOWING POSITION OF OUTLET BOX



PLAN OF KERB INLET NOT DISCHARGING DIRECTLY INTO MAIN STORMWATER DRAIN (WITHOUT COVER)

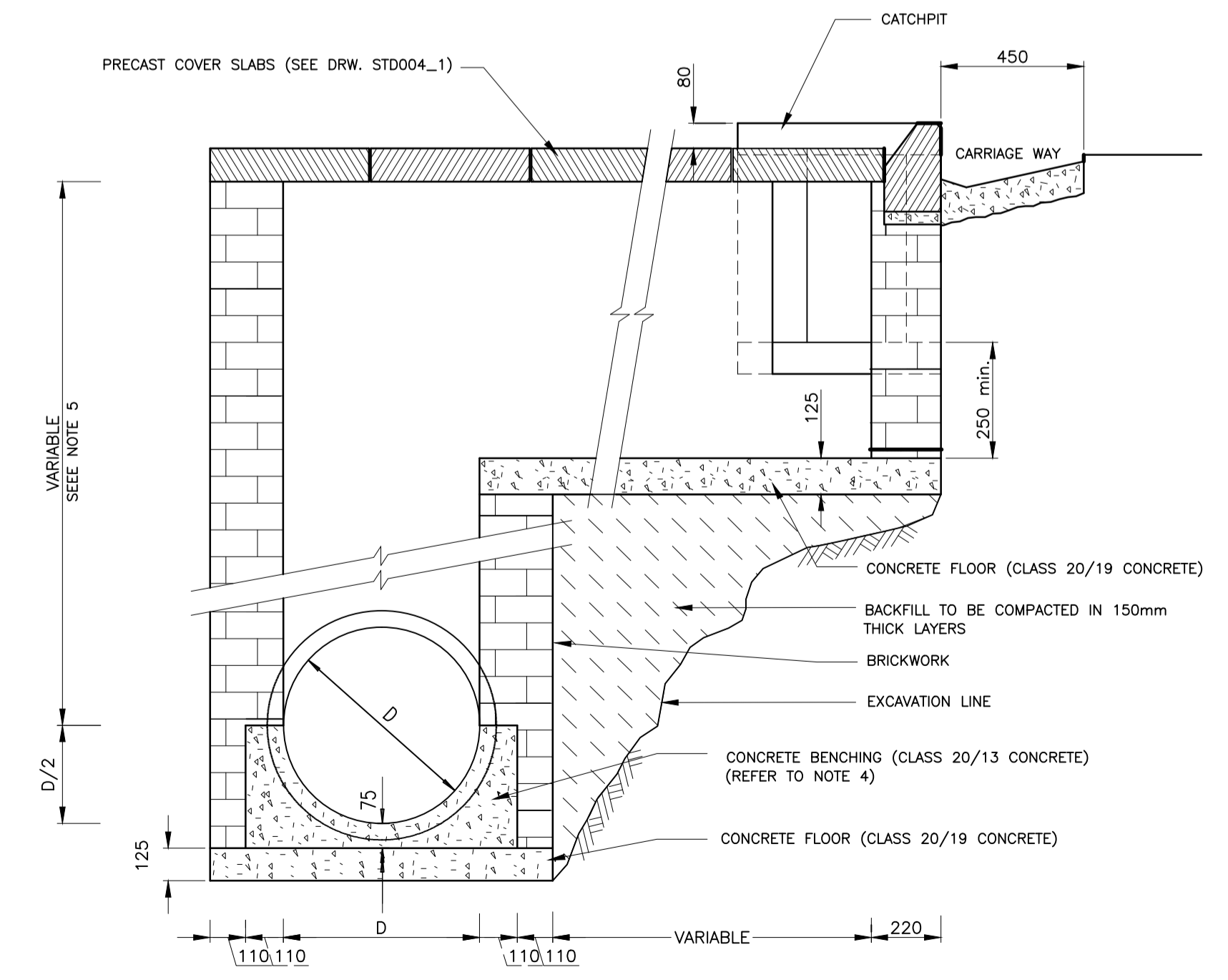


SECTION A-A

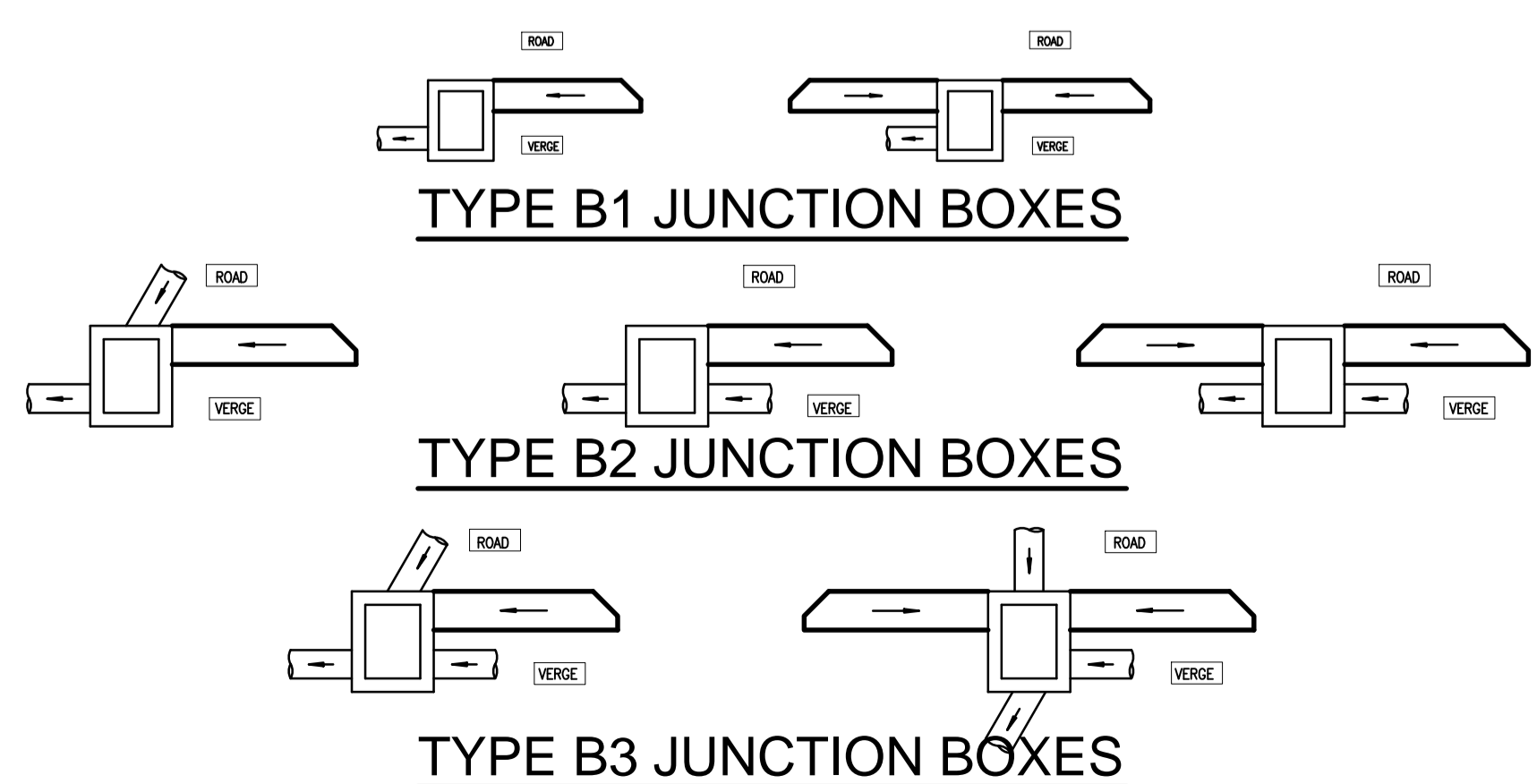


SECTION B-B

NOTE:  
WHERE PROVISION IS MADE FOR FUTURE ROAD WIDENING AND THE MAIN DRAIN IS CONSTRUCTED AWAY FROM THE CURRENT EDGE OF ROAD THE MAXIMUM LENGTH OF THE JUNCTION BOX IS TO BE LIMITED TO 3,0m WHICH A PIPE IS TO BE PROVIDED BETWEEN THE KERB INLET JUNCTION BOX AND THE MAIN STORMWATER DRAIN.



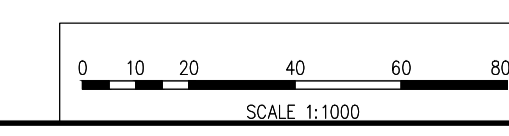
SECTION C-C



TYPE B1 JUNCTION BOXES

TYPE B2 JUNCTION BOXES

TYPE B3 JUNCTION BOXES



AMENDMENTS				
NR.	DATE	APPROVED	DESCRIPTION	PAR.

DESIGNED J. CRONJE	DATE	DRAWN S. AUDIE	DATE
DESIGN CHECKED BY S. NAIDOO	DATE	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS	DATE

**CITY OF TSHWANE**  
ROADS AND TRANSPORT DEPARTMENT

GROUP HEAD  
Mr Letonkane P. (Pheko)

DIVISIONAL HEAD  
Mr Marven K. Thagale

P.O. BOX 1409  
PRETORIA  
0001

DRAWING APPROVED BY DIVISIONAL HEADS  
TRANSPORT INFRASTRUCTURE DESIGN AND CONSTRUCTION  
DIVISIONAL HEAD  
Mr K. Thagale (Marven)

TRANSPORTATION PLANNING  
DIVISIONAL HEAD  
Mr L. Swanspoel (Lourens)

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWING APPROVED BY GROUP HEAD  
Mr Letonkane P. (Pheko)

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**TYPICAL STANDARD DETAILS**

**JUNCTION BOX AND MANHOLE DETAILS:  
TYPE B JUNCTION BOX**

CONTRACT No.:	PROJECT No.:
DATE: FEBRUARY 2017	SCALE: AS SHOWN
ORIGINAL PAPER SIZE: A1	DRAWING NO. STD004
SHEET NO. 3 OF 7	REVISION