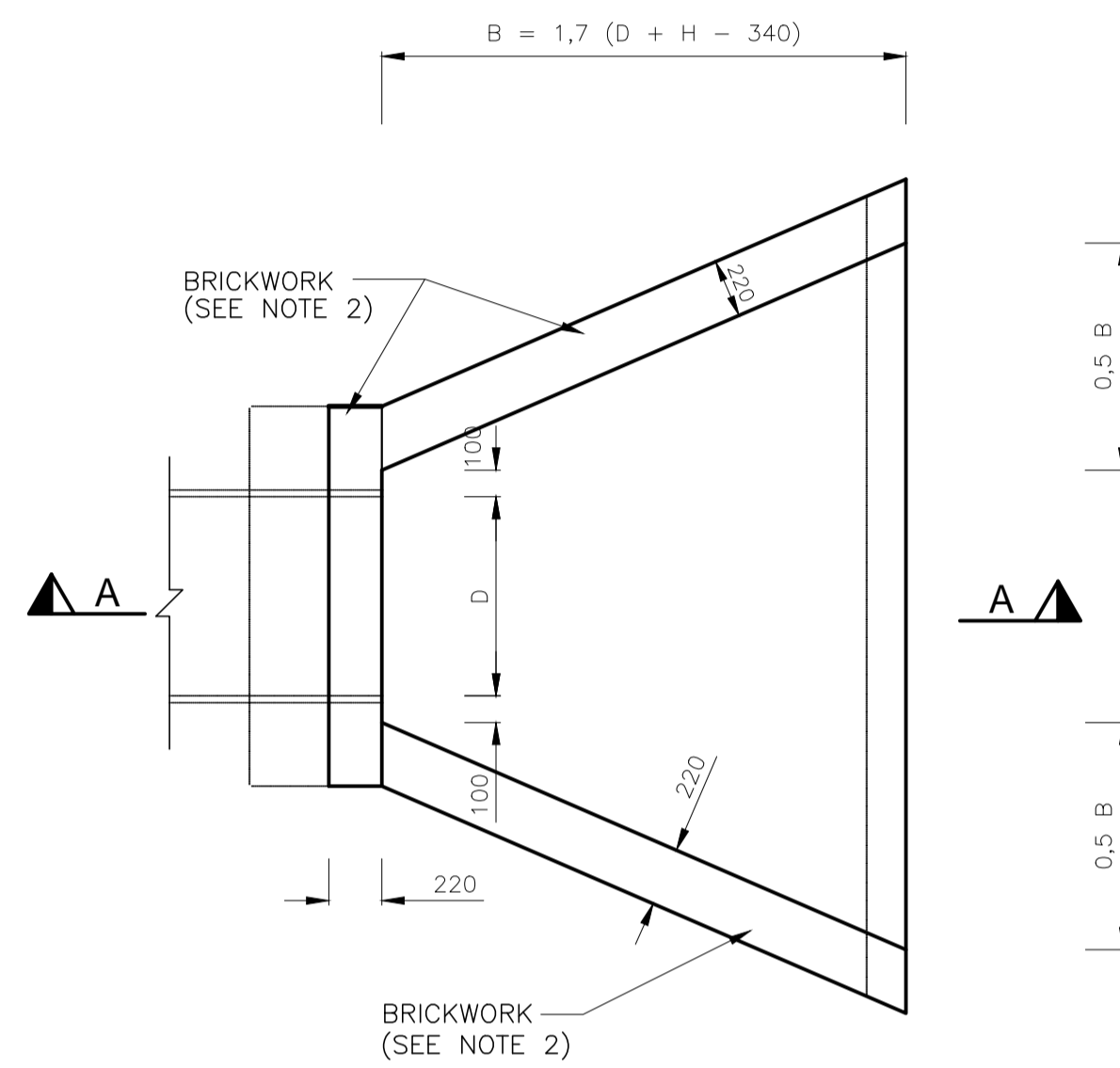
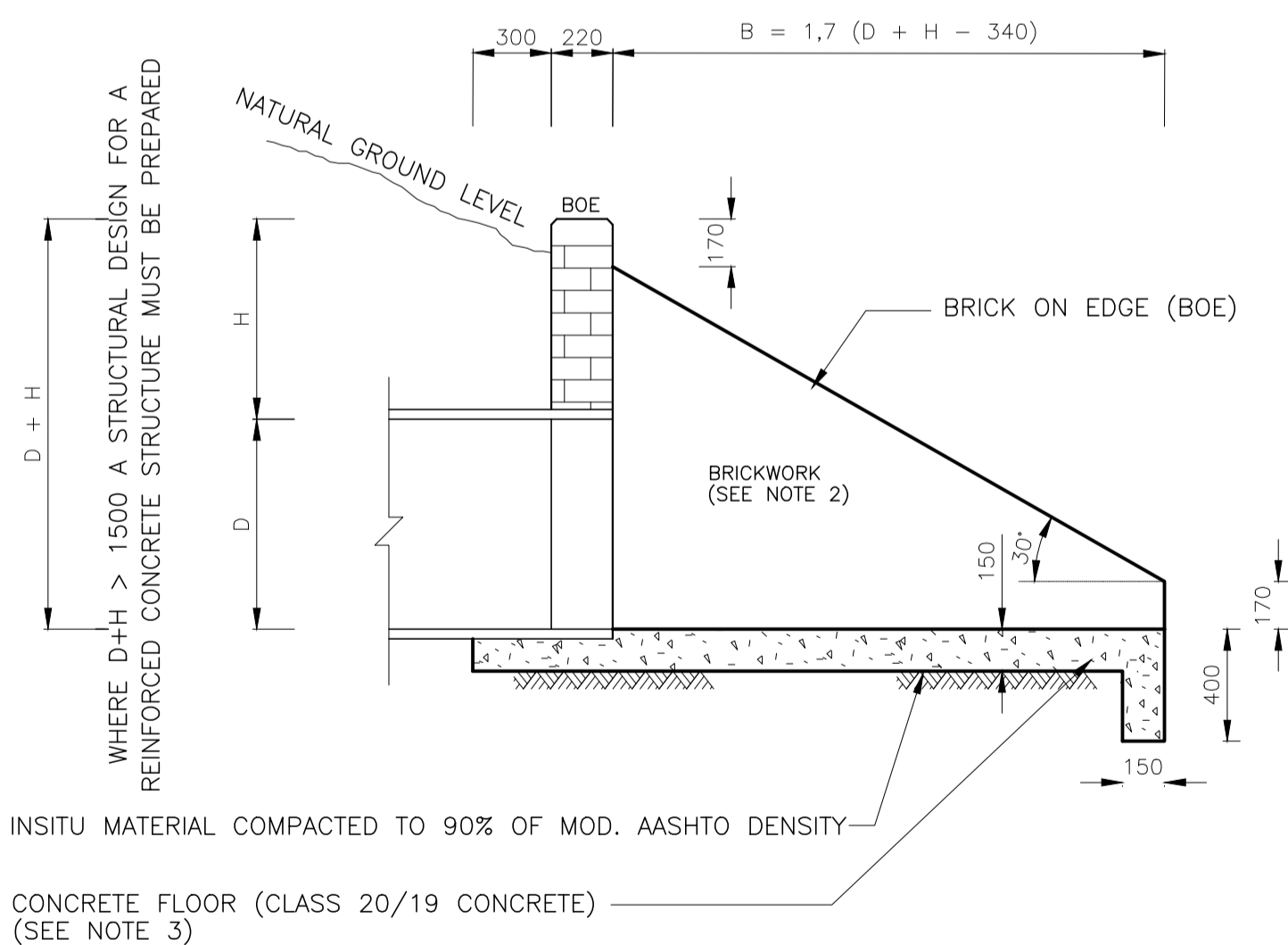


REFER TO NOTE 1 FOR APPLICATION OF TYPICAL STORMWATER OUTLET STRUCTURE

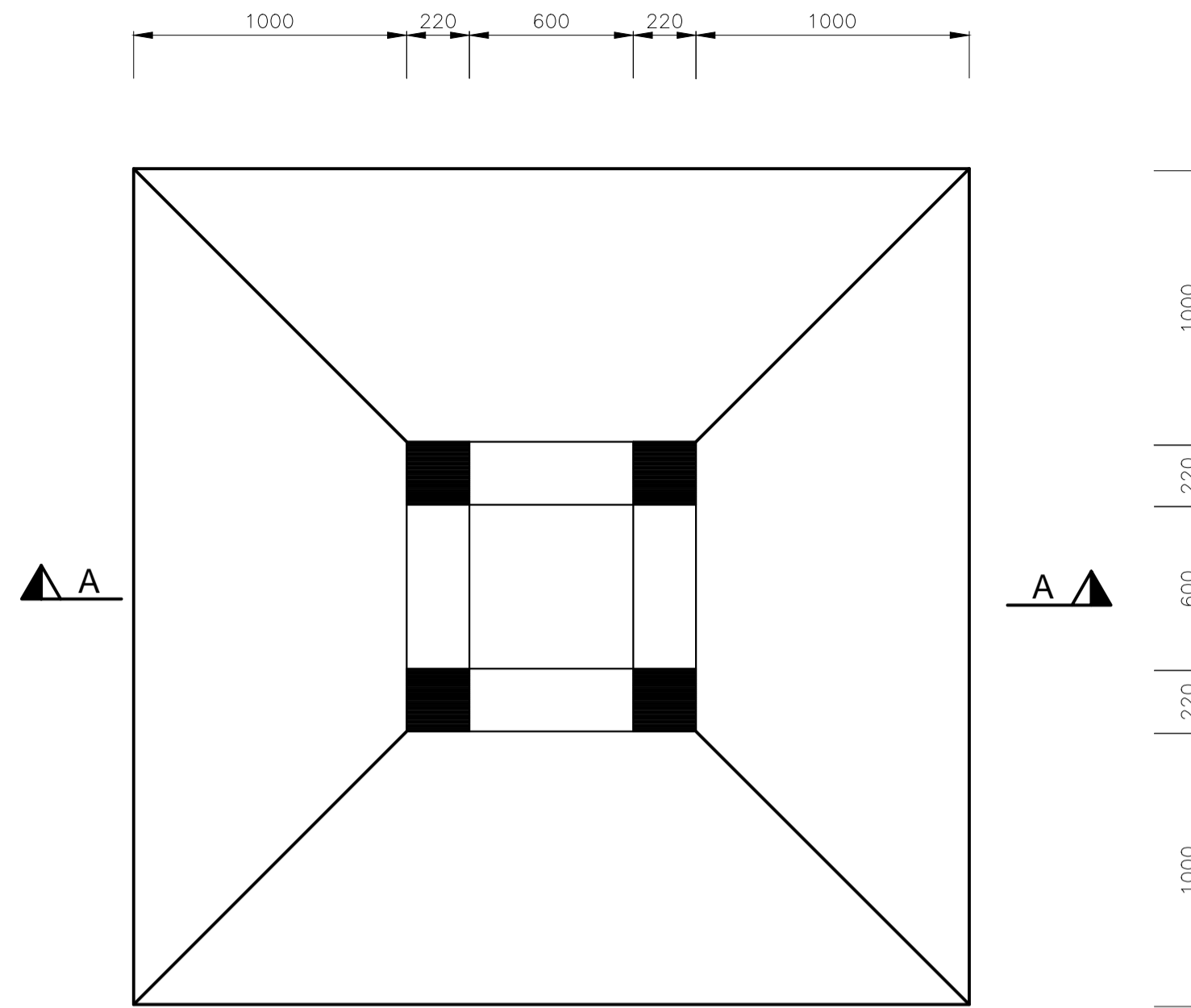
ELEVATION OF TYPICAL STORMWATER OUTLET STRUCTURE



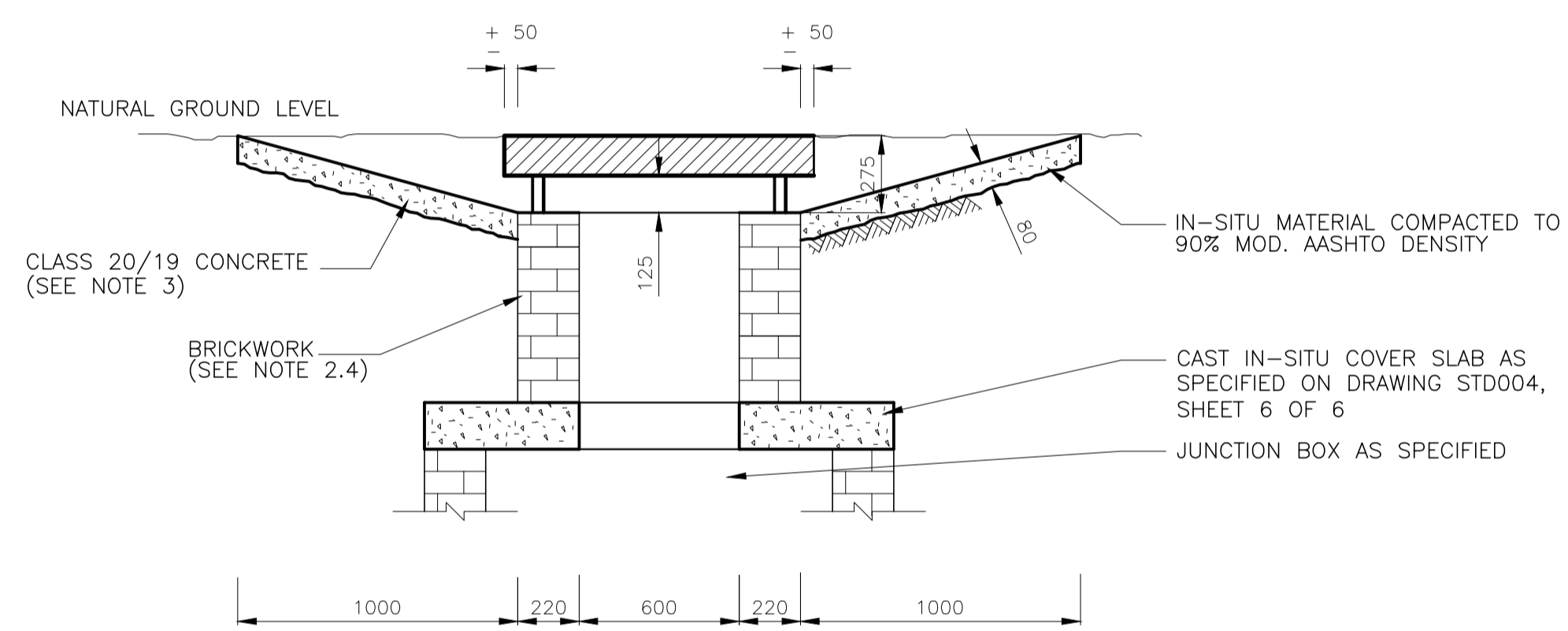
PLAN OF TYPICAL STORMWATER OUTLET STRUCTURE



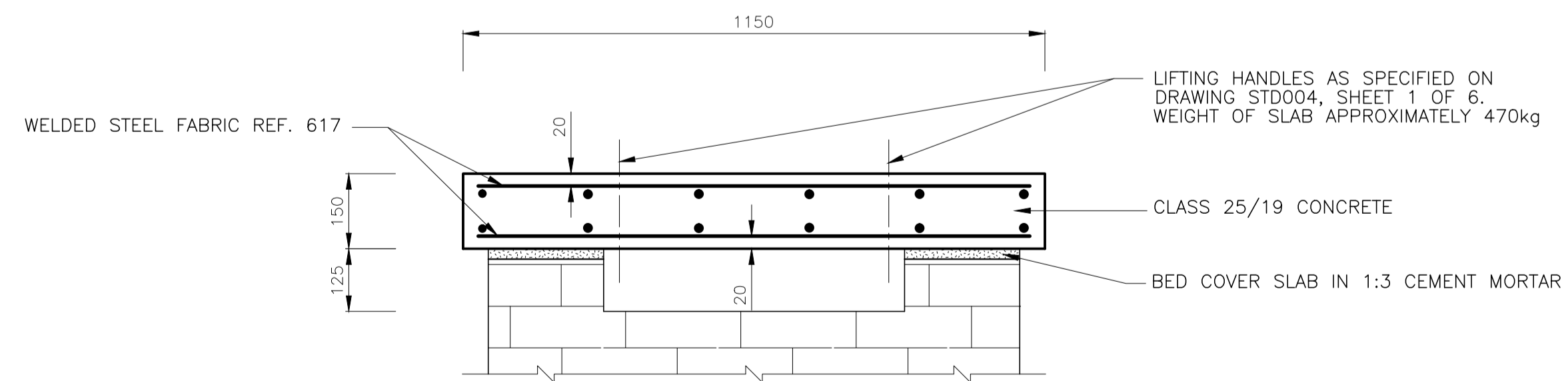
SECTION A-A



PLAN OF FIELD INLET (Without cover slab)



SECTION B-B



DETAIL OF PRECAST COVER SLAB

NATURAL GROUND  
TYPICAL

NOTES AND SPECIFICATIONS

1. APPLICATION OF TYPICAL OUTLET STRUCTURE
  - 1.1 THE TYPICAL STORMWATER OUTLET STRUCTURE MAY ONLY BE USED WHERE:
    - SPECIFIED BY THE ENGINEER
    - THE FLOW VELOCITY AT THE OUTLET PERMITS THE USE
    - $D + H < 1500$
  - 1.2 FOR HIGHER FLOW VELOCITIES THE STRUCTURE MUST BE MODIFIED OR ANOTHER TYPE OF STRUCTURE MUST BE USED, ACCORDING TO THE SPECIFICATIONS OF THE ENGINEER.
  - 1.3 NO SCOURING OR EROSION MAY OCCUR DOWNSTREAM OF THE OUTLET STRUCTURE.
  - 1.4 FOR LARGER STRUCTURES A STRUCTURAL REINFORCED CONCRETE DESIGN IS REQUIRED.
2. MASONRY WALLS OF OUTLET STRUCTURE
  - 2.1 MASONRY WALLING SHALL CONFORM IN ALL RESPECTS TO THE REQUIREMENTS OF SANS 10164-1
  - 2.2 MORTAR SHALL BE CLASS II (COMPRESSIVE STRENGTH OF 7 MPa AT 28 DAYS).
  - 2.3 THE REQUIREMENTS SET OUT IN APPENDIX B OF SANS 10164-1 SHALL BE ADHERED TO UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER.
  - 2.4 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.
3. CONCRETE
  - 3.1 ALL CONCRETE TO BE CURED FOR A MINIMUM PERIOD OF 7 DAYS.

AMENDMENTS				
NR.	DATE	APPROVED	DESCRIPTION	PAR.

DESIGNED P. A. ODENDAAL Pr.Eng.	DRAWN S. AUDIE
DESIGN CHECKED BY P. A. ODENDAAL Pr.Eng.	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS

PROJECT STATUS			
<input type="radio"/> CONCEPT DRAWING	<input type="radio"/> TENDER DRAWING	<input type="radio"/> APPROVED FOR CONSTRUCTION DRAWING	<input type="radio"/> AS BUILT DRAWING

PROJECT ENGINEER (CONSULTANT)	INITIALS AND SURNAME	SIGNATURE AND P. No.	DATE
INSPECTOR OF WORKS (CITY OF TSHWANE)	INITIALS AND SURNAME	SIGNATURE AND P. No.	DATE

CONSULTANT DETAIL
-------------------

**CITY OF TSHWANE**  
**ROADS AND TRANSPORT DEPARTMENT**  
 Mr P. J. Letlorkane  
 STRATEGIC EXECUTIVE DIRECTOR  
 P.O. BOX 1409  
 PRETORIA 0001

Ms. L. V. Kgakhe-Phe  
 EXECUTIVE DIRECTOR  
 P.O. BOX 1409  
 PRETORIA 0001

DRAWING APPROVED BY EXECUTIVE DIRECTOR  
 Ms. L. V. Kgakhe-Phe

**TYPICAL STANDARD DETAILS**

**STORMWATER INLET & OUTLET STRUCTURES**  
**FIELD INLET AND STORMWATER OUTLET**

ROADS AND STORMWATER For Internal Approval	
RECEIVED SIGN WHERE APPLICABLE	
DIRECTOR: INFRASTRUCTURE PROVISION	SIGNATURE _____ DATE _____
DIRECTOR: INFRASTRUCTURE CONSTRUCTION (PROJECT) MANAGEMENT	SIGNATURE _____ DATE _____
DIRECTOR: INFRASTRUCTURE ASSET MANAGEMENT	SIGNATURE _____ DATE _____
DIRECTOR: TRANSPORT INFRASTRUCTURE PLANNING	SIGNATURE _____ DATE _____
DIRECTOR: INTELLIGENT TRANSPORT SYSTEMS AND TRAFFIC ENGINEERING	SIGNATURE _____ DATE _____
DIRECTOR: INFRASTRUCTURE MAINTENANCE MANAGEMENT (IMM)	SIGNATURE _____ DATE _____

CONTRACT No.:	PROJECT No.:
DATE: MAY 2013	SCALE: AS SHOWN
DRAWING NO: <b>STD005</b>	SHEET NO: 1 OF 1
ORIGINAL PAPER SIZE: A1	REVISION

