



DRG. No.	REFERENCE DRAWINGS
MD1993-03-001	LAYOUT PLAN
MD1993-03-002	DN700 ROUTE PLAN AND SMALL SCALE LONGITUDINAL SECTIONS
MD1993-03-003	DN200 (OFF-TAKE) ROUTE PLAN AND SMALL SCALE LONGITUDINAL SECTIONS
MD1993-03-010	DN700 ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 1 OF 4)
MD1993-03-011	DN700 ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 2 OF 4)
MD1993-03-012	DN700 ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 3 OF 4)
MD1993-03-013	DN700 ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 4 OF 4)
MD1993-03-014	DN200 (OFF-TAKE) ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 1 OF 3)
MD1993-03-015	DN200 (OFF-TAKE) ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 2 OF 3)
MD1993-03-016	DN200 (OFF-TAKE) ROUTE PLAN AND LONGITUDINAL SECTIONS (SHEET 3 OF 3)
MD1993-03-040	ROAD CROSSING DETAILS
MD1993-03-041	STREAM CROSSING DETAILS
MD1993-03-042	STREAM SCOUR CHAMBER DETAILS
MD1993-03-043	CANAL CROSSING DETAILS
MD1993-03-060	OFF-TAKE 2A DETAILS
MD1993-03-061	OFF-TAKE 2B DETAILS
MD1993-03-070	CONNECTION TO TANKS
M1993-03-080	STANDARD DETAILS
MD1993-03-081	GENERAL DETAILS (SHEET 1 OF 2)
MD1993-03-082	GENERAL DETAILS (SHEET 2 OF 2)

**NOTES:**

**PIPEWORK:**

- ALL BOLTS TO BE HOT-DIPPED GALV. TO SANS 1463.
- ALL MILD STEEL PIPEWORK, COLLARS AND GROUCH PLATES TO BE MANUFACTURED FROM GRADE X42 STEEL (MINIMUM YIELD STRENGTH OF 289 MPa) AND WELDED IN ACCORDANCE WITH BS5950.
- ALL PIPEWORK PASSING THROUGH CHAMBER WALLS TO BE WRAPPED WITH DENSO ULTRAFLEX, OR EQUAL APPROVED. THIS WRAPPING TO EXTEND 150mm BEYOND THE FACE OF THE WALL EACH SIDE AND 75mm INTO THE CONCRETE. (WITH MIN. 55% OVERLAPPING).
- MINIMUM CLEARANCE BETWEEN ALL PIPEWORK AND REINFORCING STEEL TO BE 75mm.
- ALL BURIED NUTS AND BOLTS TO BE COATED WITH DENSO MASTIC, IN ACCORDANCE WITH THE PROJECT SPECIFICATION.
- FLANGES TO BE EN 1092-1:2007 TYPE 01, TABLE 14(PN25) FOR FLANGES GREATER THAN DN600 & SANS 1123 TABLE 2500/3 FOR FLANGES DN600 OR SMALLER. DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO ORDERING.

**CONCRETE:**

- ALL EXPOSED EDGES TO BE CHAMFERED 20 x 20 UNLESS OTHERWISE NOTED.
- MINIMUM COVER TO ALL REINFORCING TO BE 40mm UNLESS OTHERWISE NOTED.
- CONCRETE GRADE:-  
BLINDING - GRADE 15/19 MPa  
BENCHING - GRADE 15/19 MPa  
SLABS & WALLS - GRADE 30/19 MPa

**GENERAL:**

- ALL STEELWORK SHALL BE IN ACCORDANCE WITH SANS 0162 - THE STRUCTURAL USE OF STEEL.
- MATERIAL SPECIFICATION LADDERS, OPENING FRAMES & COVERS AND PIPE SUPPORTS: MILD STEEL TO BS 4360 GR43.

**PIPE SUPPORTS:**

- POSITION OF PIPE SUPPORTS AS INSTRUCTED BY ENGINEER ON SITE.

REV	DESCRIPTION	DATE	REV BY/CHKD

DESIGNED: M.N.  
DRAWN: S.K.  
CHECKED: N.M.

APPROVED: \_\_\_\_\_  
PROJ. PRINCIPAL: NATHI NDLOVU  
SIGNATURE: \_\_\_\_\_  
DATE (DD/MM/YYYY): \_\_\_\_\_

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PROJECT/DRAWING TITLE:  
**JOZINI REGIONAL COMMUNITY WATER SUPPLY SCHEME PHASE 1A-2**  
**CONNECTION TO TANKS**

SCALE: AS SHOWN  
SHEET: 1 OF 1  
CONTRACT No. SCMU 005/2021/2022  
PROJECT No. MD1993  
DRAWING No. MD1993-03-070  
REV: