

- NOTES:
1. GENERAL

1.1. SEWER LINE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT PARTS OF SANS 1200L AND SANS 1200 LD.

1.2. ALL TRENCHES ARE SHALL BE IN ACCORDANCE WITH SANS 1200 DB.

1.3. ALL PIPE BEDDING IS SHALL BE IN ACCORDANCE WITH SANS 1200LB.
2. CONCRETE

2.1. ALL CONCRETE IS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 30MPa.
3. MANHOLES

3.1. THE Ø1000mm PRECAST CONCRETE MANHOLE RINGS AND COVER SLABS SHALL BE TO SANS 1294.

3.2. THE PRECAST CONCRETE STARTER RING SHALL BE BONDED TO THE CAST IN SITU BASE USING SIKADUR-32N WET TO DRY EPOXY OR SIMILAR APPROVED.

3.3. ALL INTERNAL WALLS AND JOINTS SHALL BE PLASTERED WITH "SIKALITE" WATERPROOFING ADMIXTURE TO MANUFACTURERS SPECIFICATION.

3.4. BENCHING IS SHALL INCLUDE "SIKALITE" WATERPROOFING ADMIXTURE TO MANUFACTURERS SPECIFICATION.
4. MANHOLE COVERS

4.1. MANHOLE COVERS FOR ACCESS HATCHES AND STILLING CHAMBERS SHALL BE HEAVY DUTY TYPE 1A IN ACCORDANCE WITH SANS 1882.
5. PIPE SUPPORT BRACKETS

5.1. ALL SUPPORT BRACKETS SHALL BE COATED WITH A ZINC COATING APPLIED BY THERMO DIFFUSION COATING (SHERARDIZING) IN ACCORDANCE WITH BS EN 13811:2003.
6. FASTENERS AND BACK UP RINGS

7.1. BOLTS SHALL BE GR 8.8 TO BS 3692.

7.2. BOLTS, NUTS AND AND WASHERS SHALL BE COATED WITH A ZINC COATING APPLIED BY THERMO DIFFUSION COATING (SHERARDIZING) IN ACCORDANCE WITH BS EN 13811:2003.
8. VALVES

8.1. GATE VALVES SHALL BE CAST IRON FLANGED RESILIENT SEAL TYPE, COMPLYING TO SABS 664 CLASS 10.

8.2. GATE VALVES SHALL BE CLOCKWISE CLOSING AND SHALL HAVE RISING SPINDLES.
9. FLANGES

9.1. ALL FLANGES SHALL COMPLY WITH SABS 1123 TABLE 15.

9.2. THE JOINTING MATERIAL USED ON FLANGE JOINTS SHALL BE A 3mm NEOPRENE RUBBER INSERTION.

9.3. FULL FACE GASKETS SHALL BE USED ON ALL JOINTS.

9.4. ANY FASTENERS USED ON FLANGES ARE TO BE STAINLESS STEEL GRADE 316 STAINLESS STEEL TO ASTM 240.
6. HDPE PIPES

6.1. Ø125mm HDPE PIPES SHALL BE PE 100 CLASS 10 WITH A STANDARD DIAMETER RATIO OF 11 IN ACCORDANCE WITH ISO 4427.

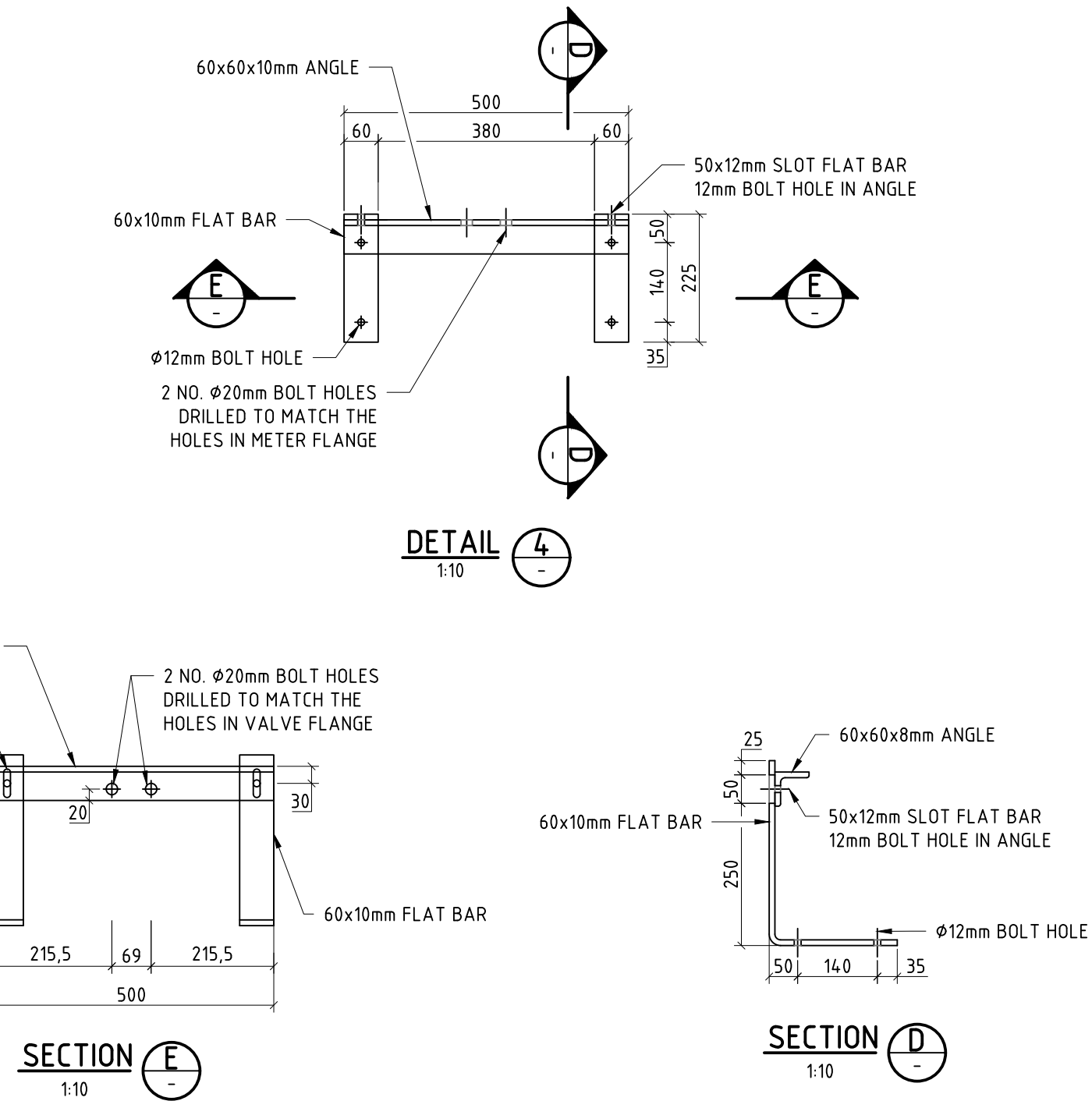
6.2. Ø125mm HDPE PIPES SHALL BE JOINED TOGETHER BY ELECTROFUSION COUPLING IN ACCORDANCE WITH SANS 10286 PART 2.

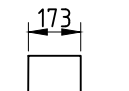
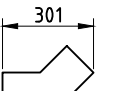
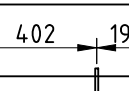
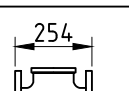
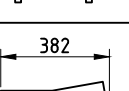
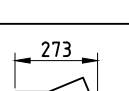
6.3. COUPLINGS MAY NOT AVE A PRESSURE RATING LOWER THAN THAT OF THE PIPES BEING JOINED TOGETHER.
7. STEP IRONS

7.1. STEP IRONS SHALL BE CALCAMITE OR SIMILAR APPROVED AT 300mm VERTICAL SPACING AND STAGGERED AT 350mm HORIZONTAL SPACING. STEP IRONS TO START FROM 250mm BELOW SLAB COVER LEVEL.
8. CORROSION PROTECTION FOR PIPEWORK




8.1. ALL EXTERNAL AND INTERNAL SURFACES OF ALL CAST FITTINGS SHALL BE PROTECTED WITH A WATER RESISTANT, NON-TOXIC AND NON-TAINTING, FUSION BONDED EPOXY PIPE COATING TO A MINIMUM THICKNESS OF 300 MICRONS IN ACCORDANCE WITH SANS 1217.

8.2. THE CONTRACTOR SHALL SUBMIT A METHOD STATEMENT FOR APPROVAL PRIOR TO APPLYING PROTECTION SYSTEM.



| MARK | COMPONENT | NO. OF | DESCRIPTION |
|------|---|--------|--|
| R02 |  | 3 ** | Ø125mm HDPE ELECTROFUSION COUPLING. |
| R04 |  | 1 | Ø125mm 45° ELECTROFUSION COUPLING. |
| R09 |  | 6 | Ø125mm HDPE SPOOL PIECE WITH PUDDLE FLANGE. 600mm LONG. ONE END FLANGED. |
| R10 |  | 3 | Ø100mm CAST IRON STRAIGHT THROUGH GATE VALVE. |
| R11 |  | 3 | Ø125mm ADJUSTABLE ELBOW ELECTROFUSION COUPLING. |
| R12 |  | 1 | Ø125mm 22.5° ELECTROFUSION COUPLING. |

** QUANTITY ONLY APPLIES TO COUPLINGS FOR SPECIAL FITTINGS ONLY. STANDARD PIPE LENGTHS ARE TO BE SUPPLIED COMPLETE WITH COUPLINGS.

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| | | Engineers | | <div><p>31 Melkhout Crescent Hout Bay 7806 Fax: +27(21) 790 4470</p></div> | | EPCM CONSULTANT: TNPA | | | | ORIGINATOR: ZAA | | | | Transnet National Ports Authority | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | REVISIONS / ISSUE AUTHORIZATION | | | | | | | | | | | | | | SIGNATURE | | | | 19/07/26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1785-CO-130-C-DWG-0001 | | SEWER GENERAL ARRANGEMENT PHASE 1 | | PROJECT NO | | DIS CODE | | AREA | | DISP | | TYPE | | DRG NO | | SHEET | | STATUS | | REV | | PROJECT NUMBER | | DY | | FBS | | DIS | | TYPE | | DRG NO | | SHT | | REV | | ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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