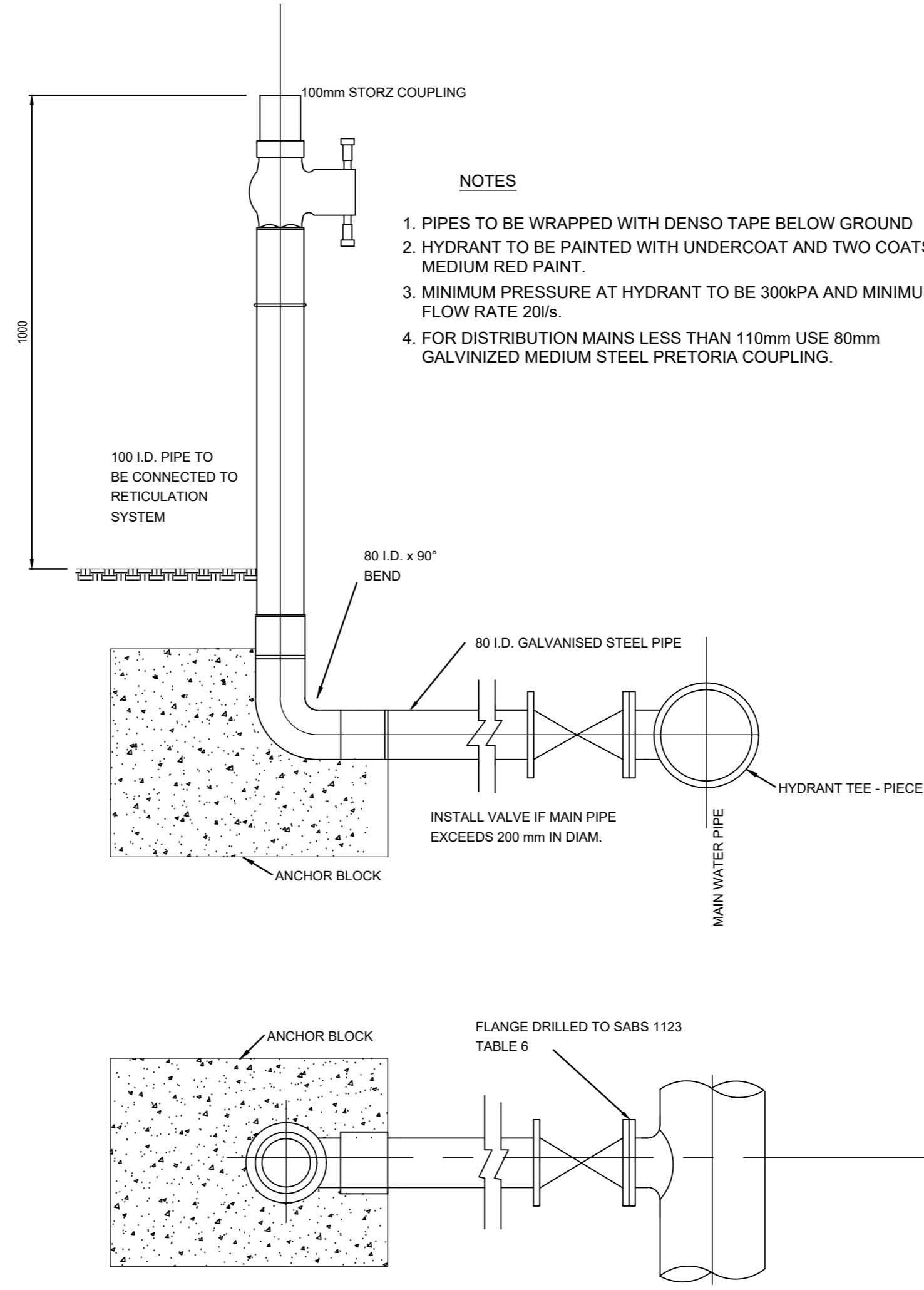
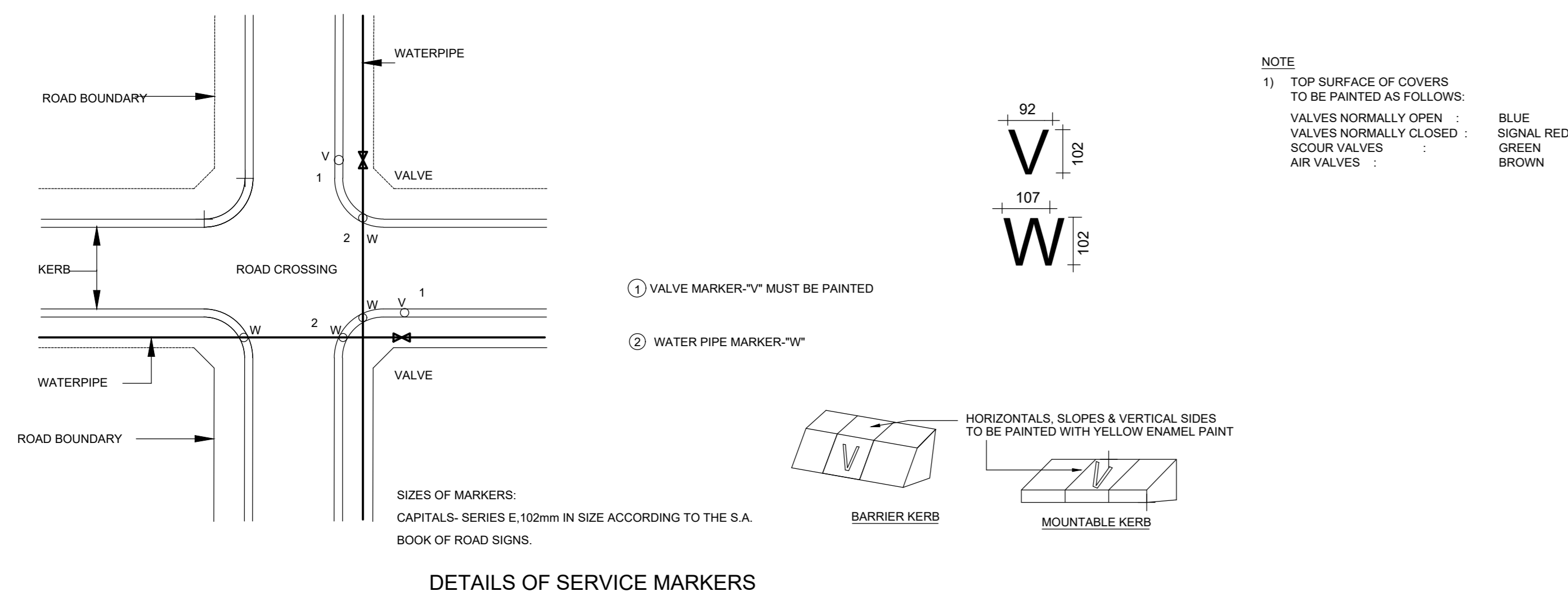


- ISOLATING VALVES**
- 1) RESILIENT SEAL VALVES (RSV) TO BE USED FOR ALL PIPE DIAMETERS VALVES WITH UPVC BODY MAY ALSO BE USED ON RETICULATION NETWORKS.
  - 2) VALVES UP TO 200MM DIAMETER MAY BE PLAIN ENDED.
  - 3) VALVES OVER 200MM DIAMETER SHALL BE FLANGED.
  - 4) MAXIMUM DISTANCE BETWEEN VALVES TO BE 600M. SPACING ON TRUNK MAINS TO BE 1-2 KILOMETERS
- FIRE HYDRANTS**
- 1) HYDRANTS TO BE TAMPERPROOF.
  - 2) QUICK COUPLING HEAD TO BE USED.
  - 3) HYDRANT STAND PIPES TO BE PAINTED MEDIUM RED ON A ZINC CHROMATE UNDERCOAT.
  - 4) HYDRANTS MUST NOT BE INSTALLED ON PIPES LESS THAN 75MM DIA.
  - 5) HYDRANTS TO BE INSTALLED OFF THE MAIN - SEE DRG. NO. DWG 3. WHERE MAIN IS Ø200 OR LARGER, AN ISOLATING VALVE MUST BE PROVIDED.
- VALVE BOXES**
- 1) VALVES UP TO 300MM DIAMETER SEE DRAWING DWG 2.
  - 2) VALVES OVER 300MM AND UP TO 600MM DIAMETER TO BE PLACED IN A 1050MM DIAMETER CONCRETE MANHOLE.
  - 3) VALVES OVER 600MM DIAMETER SHALL BE PLACED IN A SPECIALLY DESIGNED MANHOLE TO SUIT THE SITE CONDITIONS AND SIZE OF VALVE.



- GENERAL NOTES:**
- THIS DESIGN WAS ENGINEERED BY:  
 SEA PROJECTS AND ENGINEERING (PTY) LTD
1. ALL MATERIALS AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS PROJECT SPECIFICATIONS.
  2. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
  3. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS.
  4. ALL CONSTRUCTION TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
  5. FINAL POSITION TO BE DETERMINED ON SITE.
  6. ALL CONCRETE MIXES TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
  7. EXCAVATIONS TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
  8. ALL MASS CONCRETE TO BE 15MPa/19 UNLESS STATED OTHERWISE BY THE ENGINEER.
  9. BENCHING SHALL BE FINISHED WITH A 20mm DOLOMITIC LAYER PLACED WHILE CONCRETE IS STILL GREEN AND STEEL FLOAT TO SMOOTH FINISHED.
  10. BACKFILL TO BE DONE WITH G5 MATERIAL COMPACTED IN LAYERS OF 150mm THICK TO 95% MOD ASHTO AT OMC.
  11. CHANNELING MUST BE BUILT WITH GLAZED EARTHENWARE OR FIBRE CEMENT CHANNEL RECESSED INTO CONCRETE FOUNDATION.
  12. EXCAVATION PRIOR TO TRENCH EXCAVATIONS AND CONFIRM LEVELS.
  13. COMPACTION OF BEDDING MATERIAL AROUND PIPE TO BE DONE WITH SPECIAL CARE.
  14. ALL PIPES TO BE PRESSURE TESTED TESTED AFTER COMPLETION.

**LEGEND**

▲ Benchmark	⊕ Sign Post	■ Concrete Paving	— Culvert
⊕ Electric Pole	⊕ Steel Pole	■ Brick Paving	— Drain
⊕ Sign Board	⊕ Staircase	■ Tarmacadam	— Top of pipe
⊕ Fibre Manhole	⊕ Water Valve	■ Dust Road	— Fence
⊕ Lamp Post	⊕ Valve Manhole	■ Driveway	— Wall
⊕ Fire Hydrant	⊕ Boltard	■ Railway	— Bottom Kerb
⊕ Tree	⊕ Wooden Pole	■ Gate	— Top Kerb
⊕ Water Meter	⊕ Water Tank	⊕ Electric Box	— Minor Contour
⊕ Sewer Manhole	⊕ Invert Level	⊕ Stormwater Manhole	— Major Contour
⊕ Unknown Manhole	⊕ Rock		

**DESIGN COORDINATOR APPROVAL:**

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

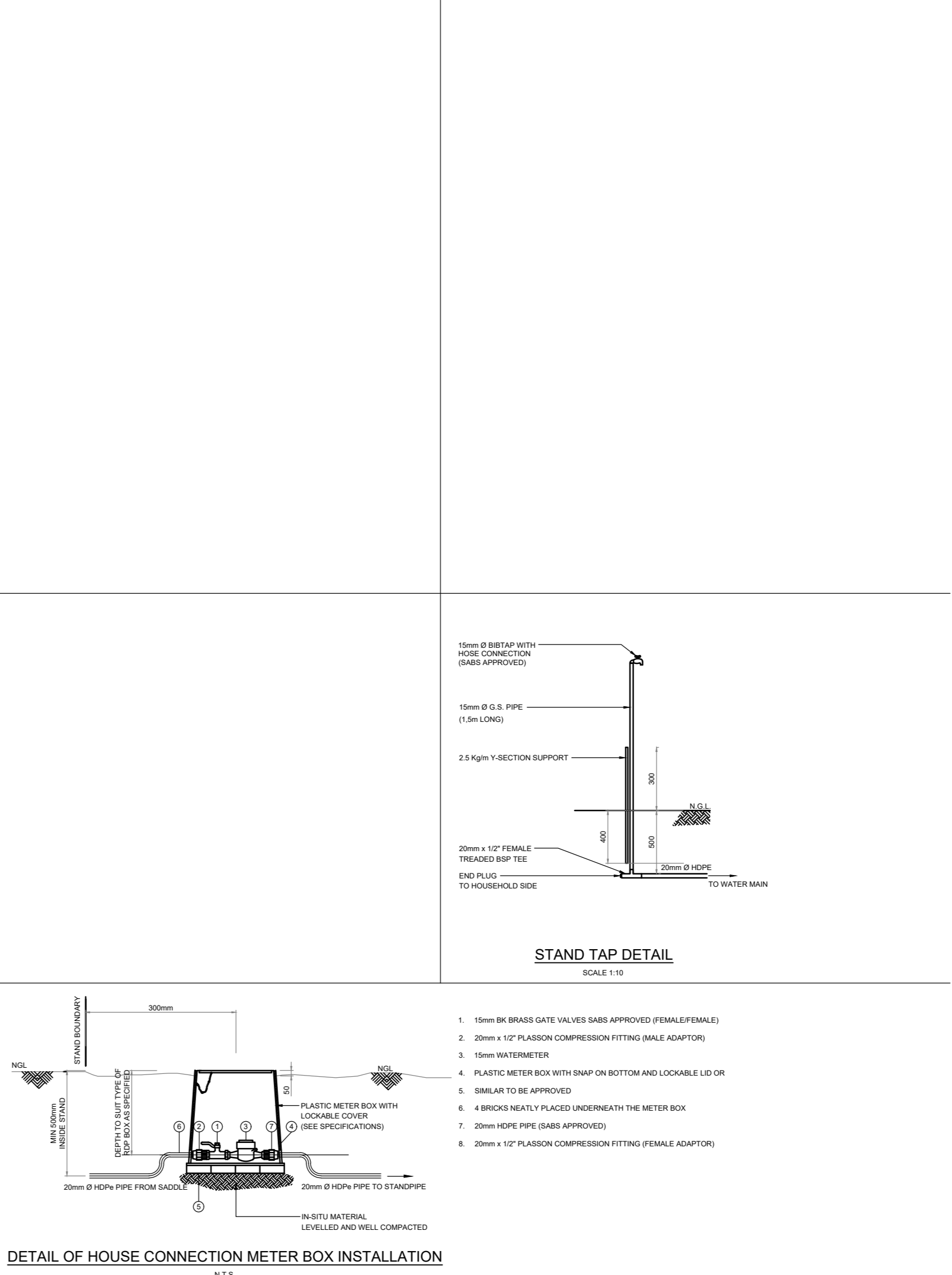
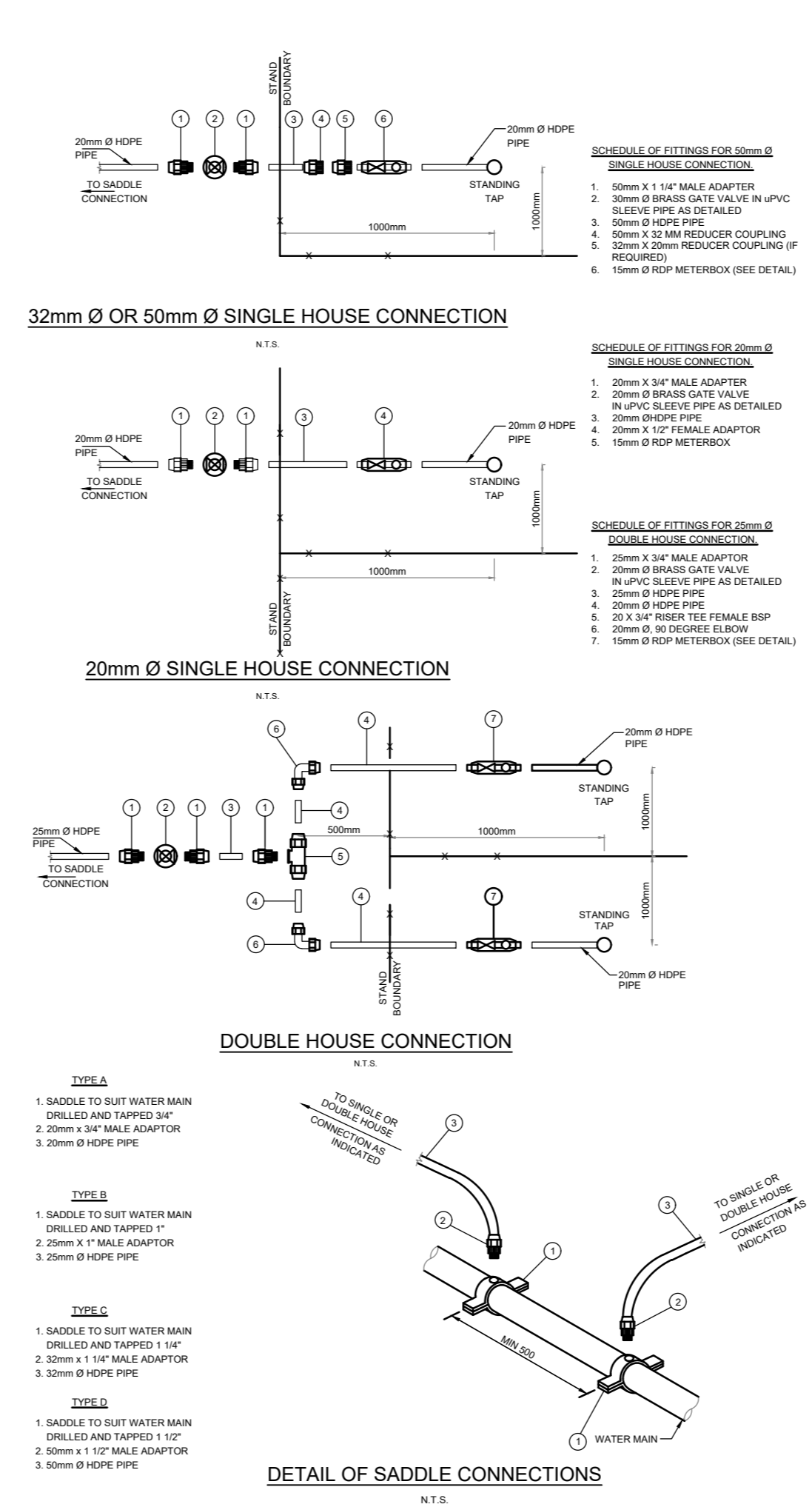
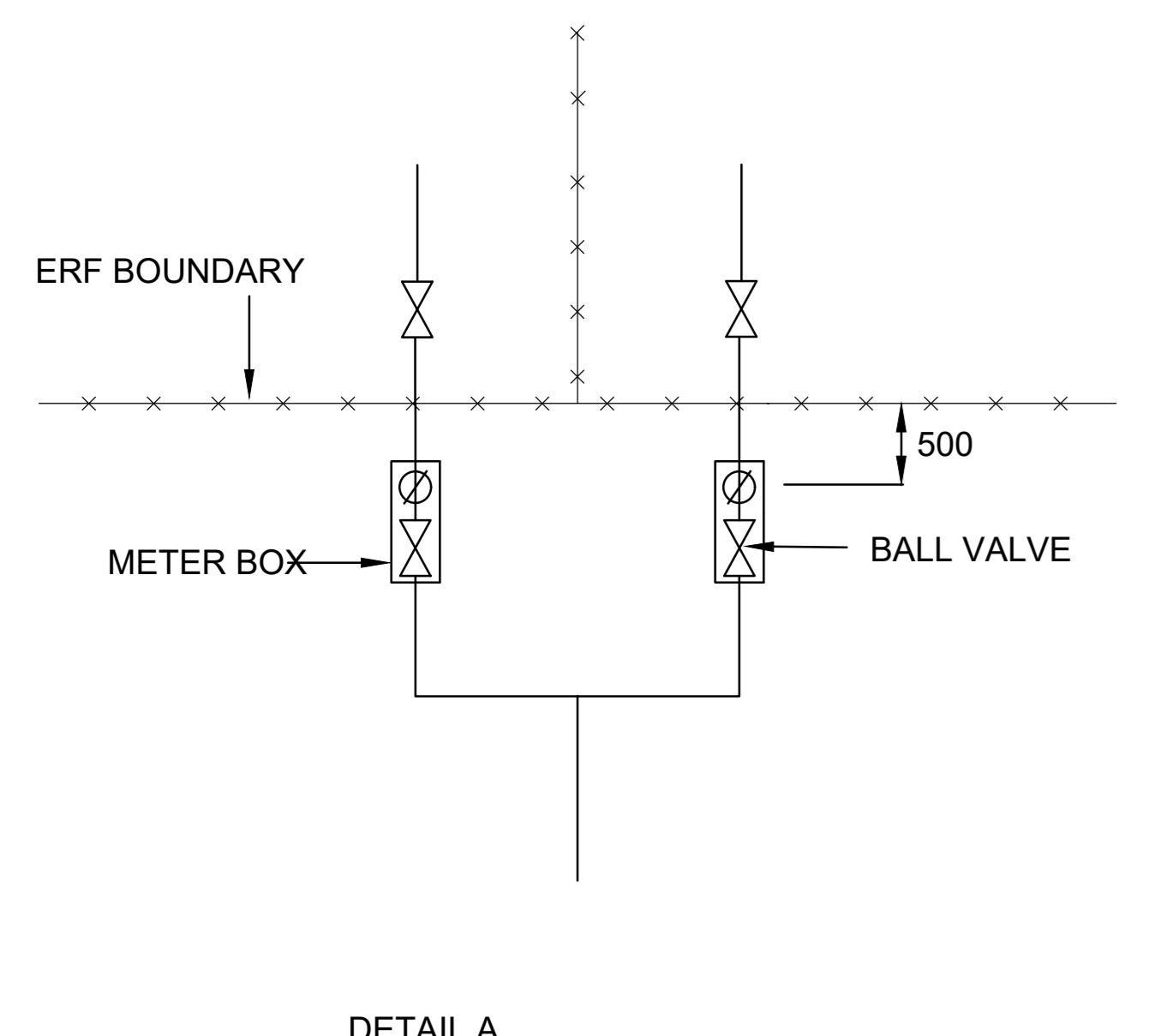
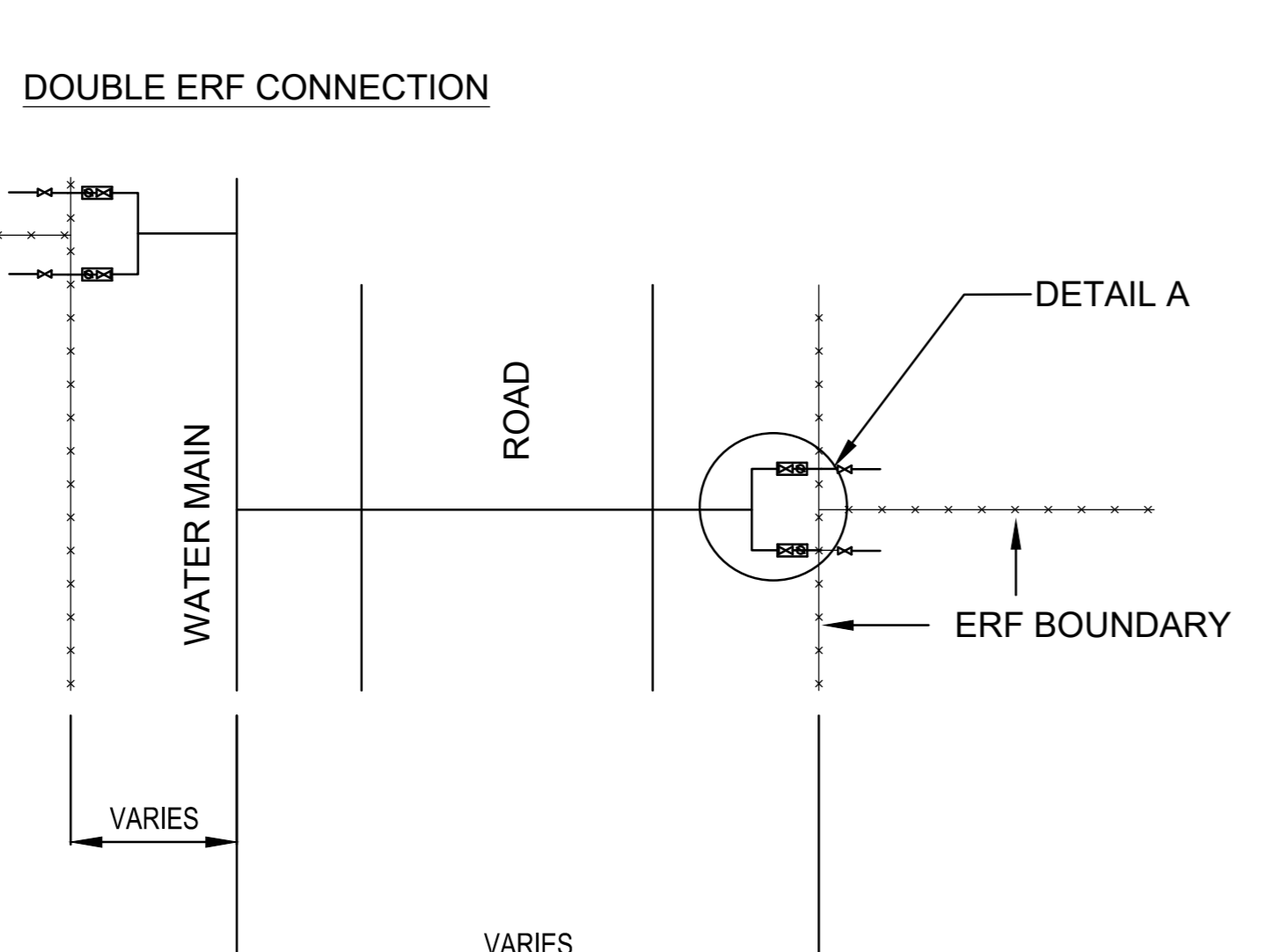
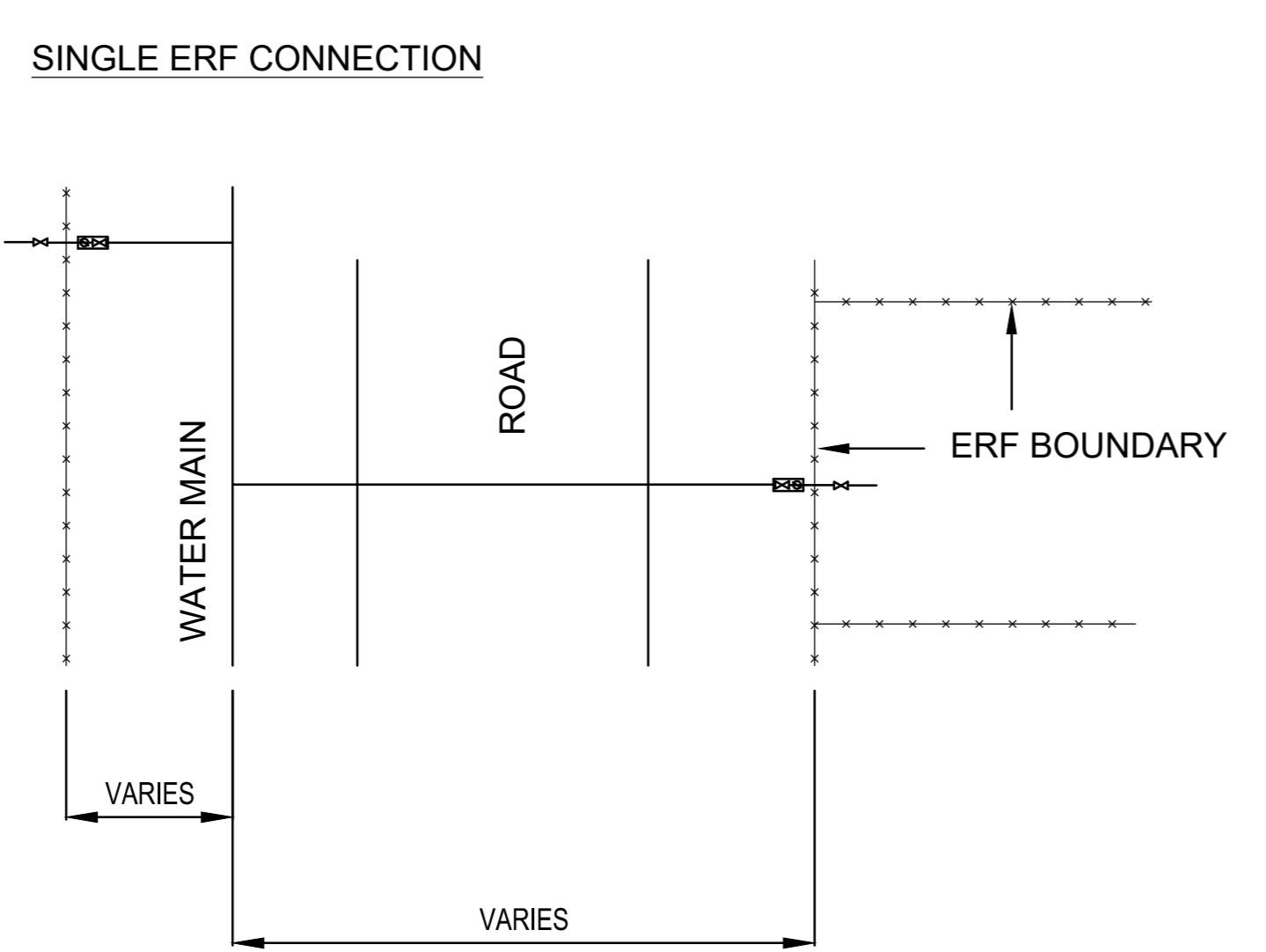
**PROJECT MANAGER APPROVAL:**

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

**CLIENT APPROVAL:**

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

- NOTES**
- SINGLE ERFVEN MINIMUM REQUIREMENTS**
- SINGLE ERF CONNECTION - 25mm HDPE CLASS 12  
 DOUBLE ERF CONNECTION - 32mm HDPE CLASS 12  
 CONNECTION FOR 3 ERFVEN - 40mm HDPE CLASS 12  
 CONNECTION FOR 4-10 ERFVEN - 63mm HDPE CLASS 12
- PRIVATE BALL VALVE TO BE INSTALLED WITHIN ONE METRE OF ERFVEN BOUNDARY. ERFVEN WITH GREATER THAN NORMAL USAGE MAY REQUEST LARGER DIAMETER CONNECTIONS. FOR LOW INCOME SERVICES, CONNECTIONS MAY BE ONE DIAMETER SMALLER WITH PRE-PAID METERS.



**REVISIONS**

NO.	DATE	DESCRIPTION	BY:	CHK:	APPR.:
A	28/05/2026	ISSUED FOR TENDER	C.K.	M.R.	S.N.

**DESIGNED: DRAWN: CHECKED: APPROVED: DATE: SCALE:**

M.R.	C.K.	M.R.	S.N.	29/05/2026	N.T.S
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**CLIENT:**

**Maquassi Hills Local Municipality**

MAQUASSI HILLS LOCAL MUNICIPALITY  
 Private Bag X3  
 19 Krugger Street  
 Wolmaranstad  
 2630

TEL: (018) 596 1068  
 FAX: (018) 596 1555  
 WEB: www.maquassihills.co.za

**PROJECT:**

**REPLACEMENT OF ASBESTOS CEMENT BULK AND RETICULATION PIPELINES**

**DRAWING TITLE:**

**MAKWASSIE RETICULATION: TYPICAL DETAILS : HOUSE CONNECTIONS**

**CONSULTANTS:**

SEA PROJECTS AND ENGINEERING

7107 Rosewood Road  
 Broadacres  
 Gauteng  
 2169

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 EMAIL : seano@seaprojects.co.za

**SIZE: PROJECT NO.: DRAWING NO.: SHEET NO.: REVISION:**

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