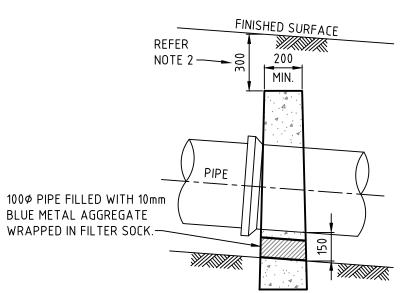


TRENCH
PIPE

150

TRENCH
WITH APPROVED
FILTER MATERIAL



<u>ELEVATION</u>

CONCRETE BULKHEAD

## PIPE ANCHOR NOTES

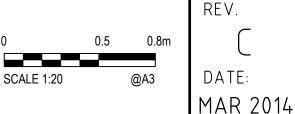
- 1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32MPa U.N.O.
- 2. ALL STORMWATER PIPES TO BE CONCRETE OR FIBRE REINFORCED CLASS 2 OR GREATER.
- 3. ALL PIPE ANCHORS TO BE KEYED INTO ROCK.
- 4. PIPE ANCHORS TO BE INSTALLED AT 1.2m INTERVALS MAXIMUM.
- 5. ANCHORS FOR PIPES GREATER THAN 450mm $\phi$  AND STEEPER THAN 10% SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER.
- 6. THRUST BLOCKS OR CAST IN SITU PITS AT BENDS IN THE PIPE SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER.

## **CONCRETE BULKHEAD NOTES**

- 1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32MPa U.N.O.
- 2. WHERE THE PIPELINE IS UNDER ROAD PAVEMENT THE TOP OF THE BULKHEAD SHALL EXTEND TO THE SUBGRADE LEVEL.
- 3. BULKHEADS ARE TO BE PLACED AT EACH COLLAR JOINT FOR PIPELINE GRADES GREATER THAN 10%.



## CONCRETE BULKHEAD AND PIPE ANCHOR



V. DRAWING No.

SD209