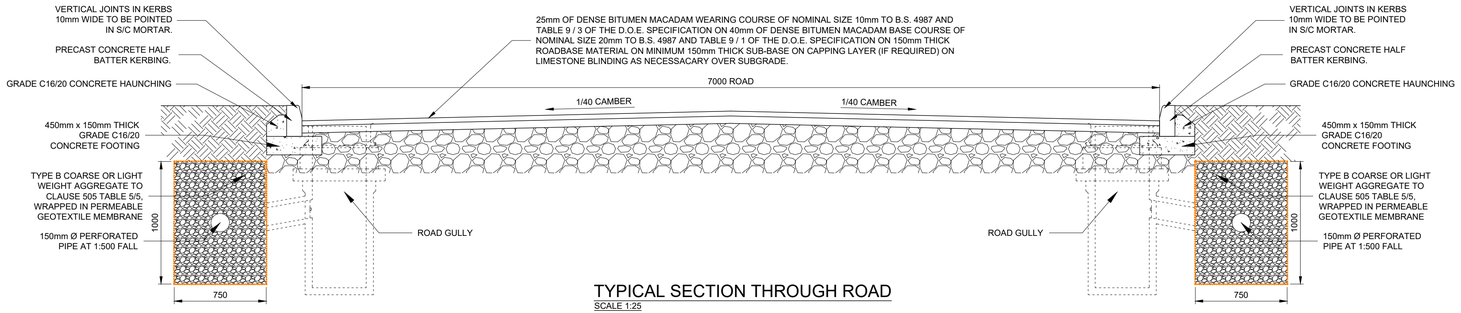
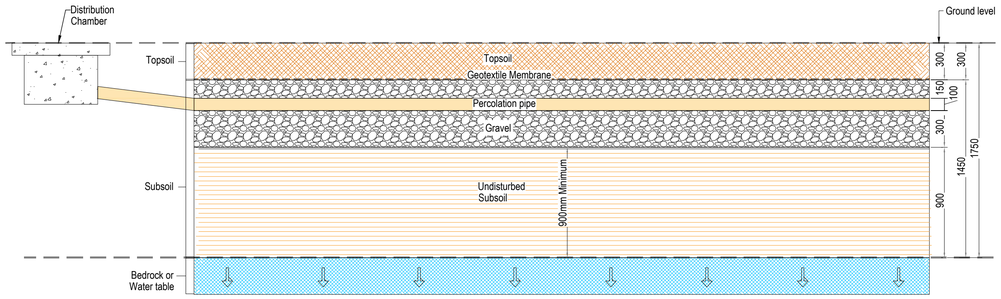
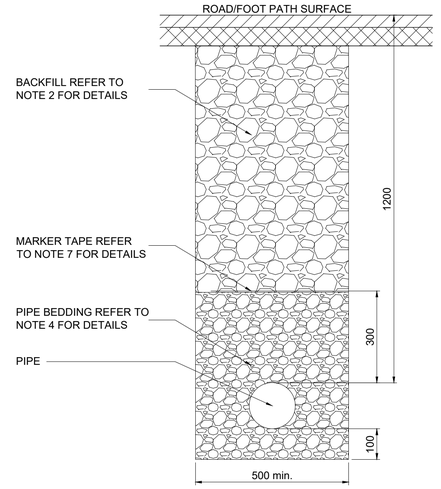


TYPICAL SECTION THROUGH ROAD
SCALE 1:25



SECTION ALONG PERCOLATION PIPE
SCALE 1:25



SECTION THROUGH ROAD
SCALE 1:10

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. CLAUSE 804 / 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE SEWER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1m OF THE PAVED EDGE OF THE ROADWAY. CLAUSE 804 / 808 IS TO BE COMPACTED AS PER CLAUSE 802 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. CLAUSE 808 IS TO BE USED WITHIN 500mm OF CEMENT BOUND MATERIALS, CONCRETE PAVEMENTS, CONCRETE STRUCTURES OR CONCRETE PRODUCTS. OTHERWISE CLAUSE 804 MAY BE USED. ALTERNATIVE BACKFILL MATERIAL TO THAT DESCRIBED ABOVE (CLAUSE 804 OR CLAUSE 808) OF THE PIPE TRENCH WILL ONLY BE ALLOWED BY IRISH WATER WHERE THE ROADS AUTHORITY IN WHOSE FUNCTIONAL AREA THE DEVELOPMENT IS LOCATED, PROVIDES WRITTEN APPROVAL TO THE DEVELOPER TO THE USE SUCH ALTERNATIVE MATERIAL.
3. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO REVIEW BY IRISH WATER.
4. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE IS EN 13242. CONCRETE BED, HAUNCH & SURROUND, WHERE REQUIRED, SHALL BE TO STD-WW-08.
5. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 804 / 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING. ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
6. PIPES SHALL NOT BE SUPPORTED ON STONES, ROCKS OR ANY HARD OBJECTS AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804 / 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
7. NON DEGRADABLE MARKER TAPE SHOULD BE INSTALLED AT TOP OF PIPE BEDDING LAYER. IN THE CASE OF NON METAL PIPE MATERIAL, THE MARKER TAPE SHOULD INCORPORATE A TRACE WIRE WHICH IS LINKED TO FITTINGS AND TERMINATED AT THE WASTE WATER PUMPING STATION AND THE DISCHARGE MANHOLE.

Notes:

1. Slope of pipe from tank to distribution box:
1 in 40 for earthenware or concrete
1 in 60 for uPVC.

2. Slope of percolation trench from distribution box: 1 in 200.
Length of percolation pipe in each trench:
10m maximum.

3. Minimum separation distances between trenches:
2m (2.5m centre to centre).

4. Diameter of pipe from septic tank to distribution box: 100-110mm.

5. Percolation pipes:
100mm bore, perforated (typically at 4, 6, 8 o'clock) smooth wall PVC drainage pipes with perforations of 6-8mm diameter at 75mm centres along the pipe.
or
Pipes with similar hydraulic properties.

6. Width of percolation trench:
500mm

7. Depth of percolation trench:
850mm below ground surface depending on site, as shown on percolation sectional drawings

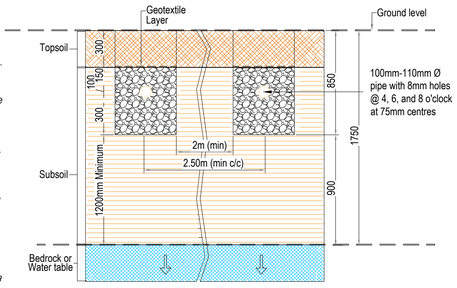
8. Backfilling of percolation trench:
300mm of 8-32mm washed gravel on invert; pipe laid at 1:200 slope surrounded by 8-32mm clean washed gravel and with 150mm of similar gravel over pipe; geotextile layer followed by 300mm topsoil to ground surface.

9. Geotextile:
Geotextile should be in accordance with EN ISO 10319.

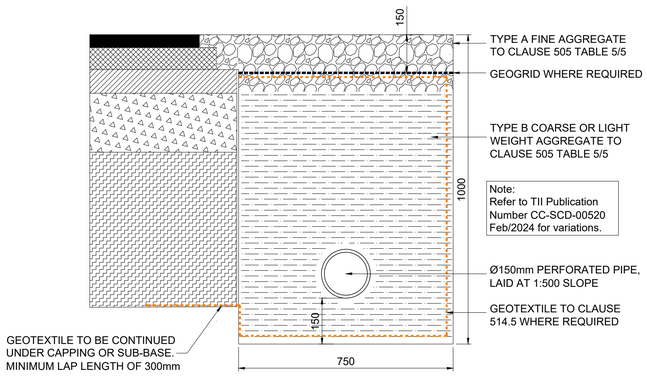
10. Access/Inspection points and vents:
These are recommended for the ends of the percolation pipes; the covers should be visible and installed to prevent the entry of water. They may also be used for rodding/scouring purposes.

11. Distribution Chamber:
The distribution chamber should be laid on a stable foundation. It should be accurately leveled to ensure that the incoming effluent is evenly split and evenly diverted to the outlet percolation pipes

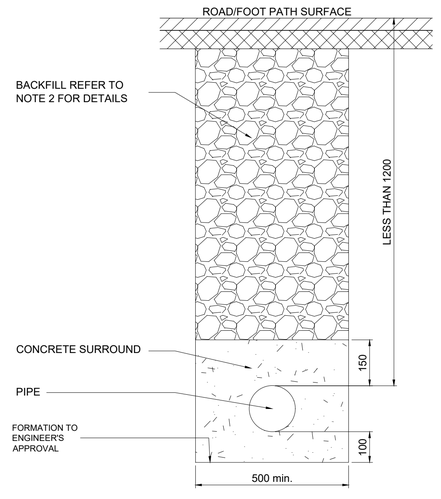
** Before Installation the holes in the percolation pipes should be inspected to check that they are the correct size and free from debris.*



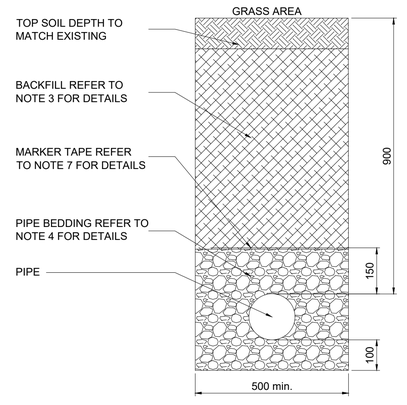
CROSS SECTION OF PERCOLATION PIPES
SCALE 1:25



FILTER DRAIN SECTION AT ROAD WIDENING TO THE PUBLIC ROAD (L8763)
SCALE 1:10



SECTION THROUGH ROAD WITH CONCRETE SURROUND
SCALE 1:10



SECTION THROUGH GRASS AREA
SCALE 1:10

NOTES:
1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

Rev.	Modifications	By	Date
P01	PLANNING	SK	07.06.24

© COPYRIGHT OF

HALSTON
Email: info@halston.ie
Tel: 094 9010111
IHUB BUILDING
WESTPORT ROAD
CASTLEBAR
CO. MAYO.
F23 K162

Client	COOLPOWRA FLEXGEN LIMITED
Project	COOLPOWRA (OCGT)
Title	PERCOLATION & FILTER DRAINAGE DETAILS
Stage	PLANNING

Drawn	SK	Checked WD	Approved CS
Date	June 2024		
Scales	AS SHOWN		
Sheet	1 of 1	Sheet Size	A1
Job No.	SEP-0398	Status	
Dwg. No.	CPA-HAL-OC-XX-DR-PL-1920	Rev	P01