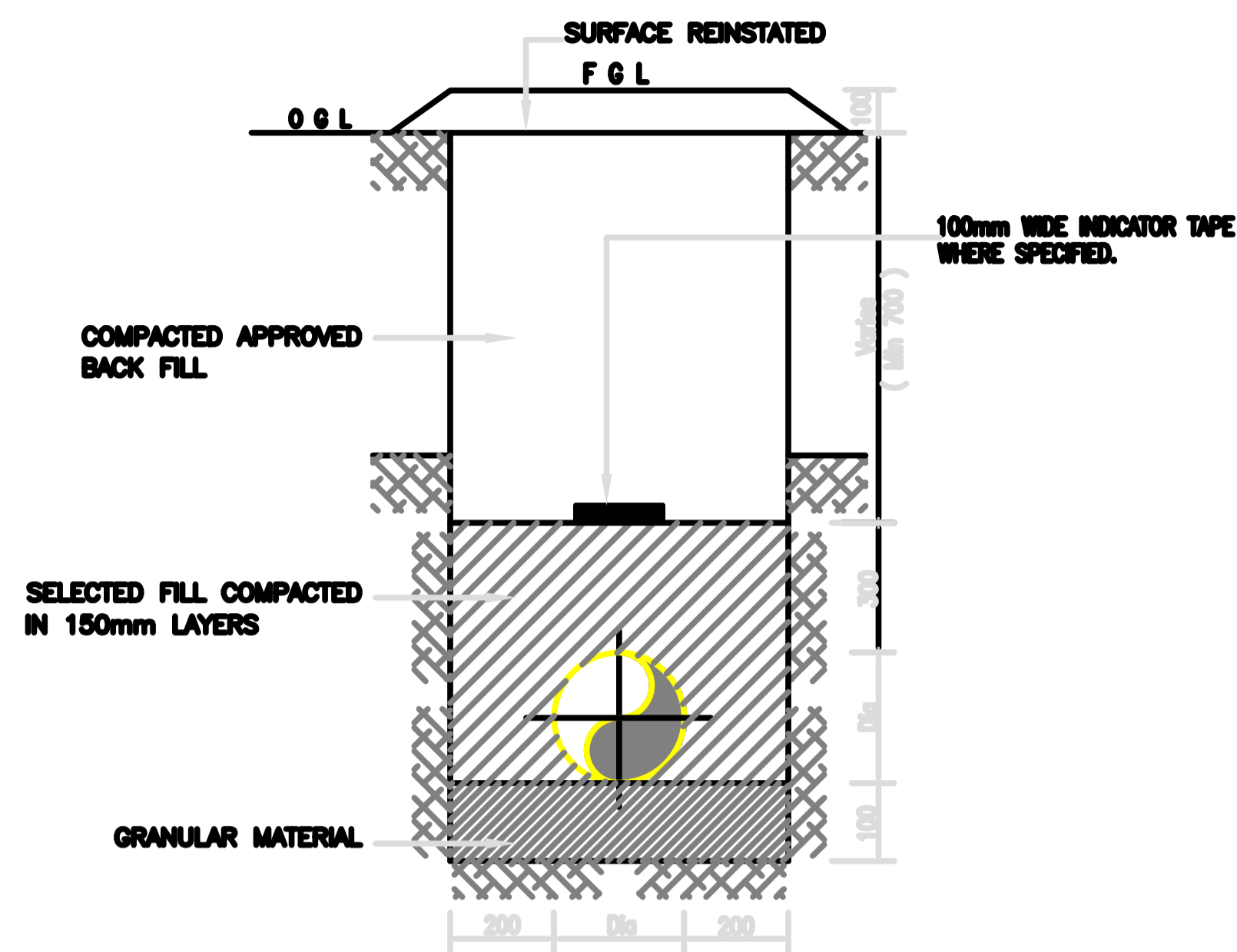
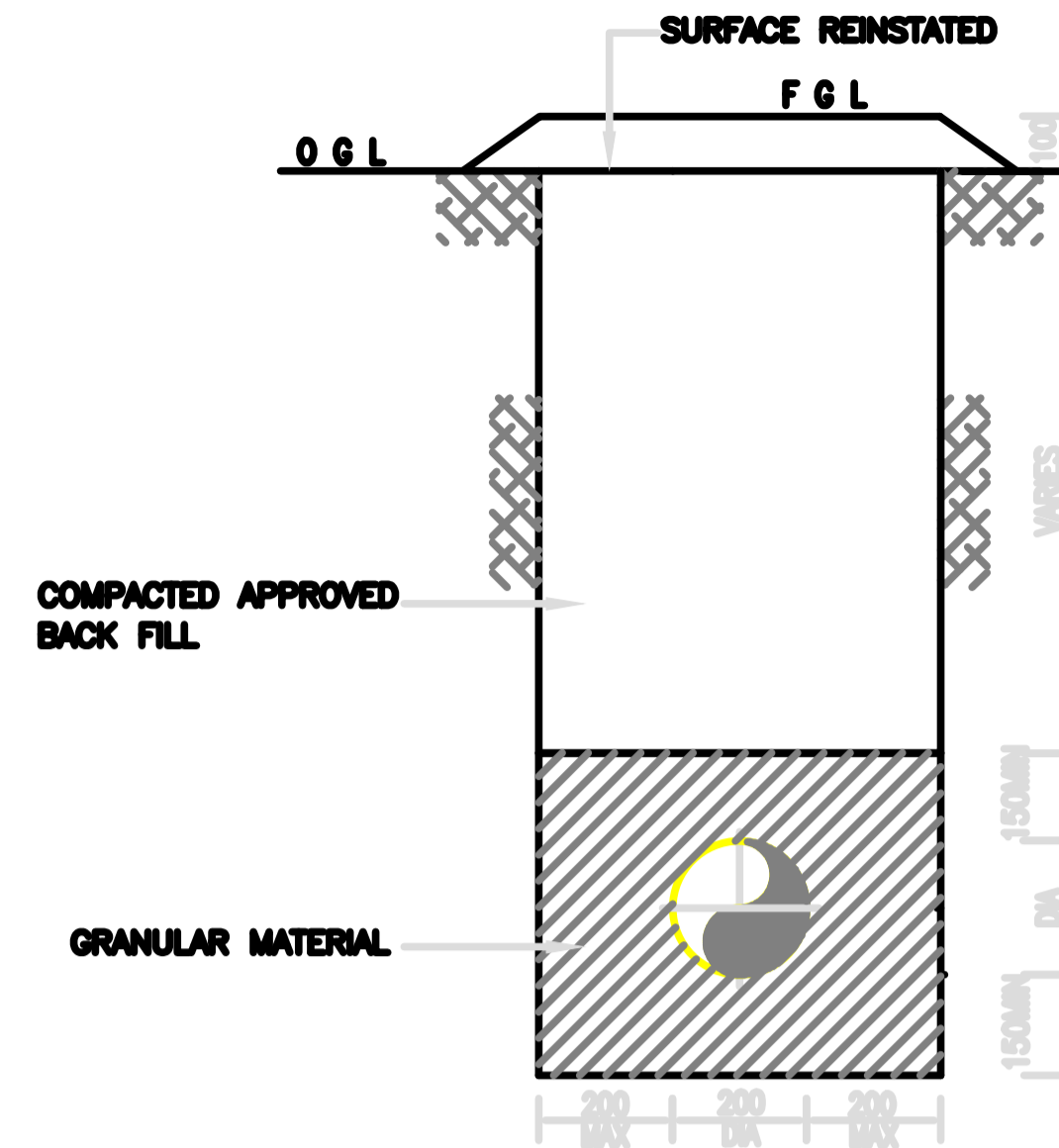


TYPICAL TRENCH
N.T.S

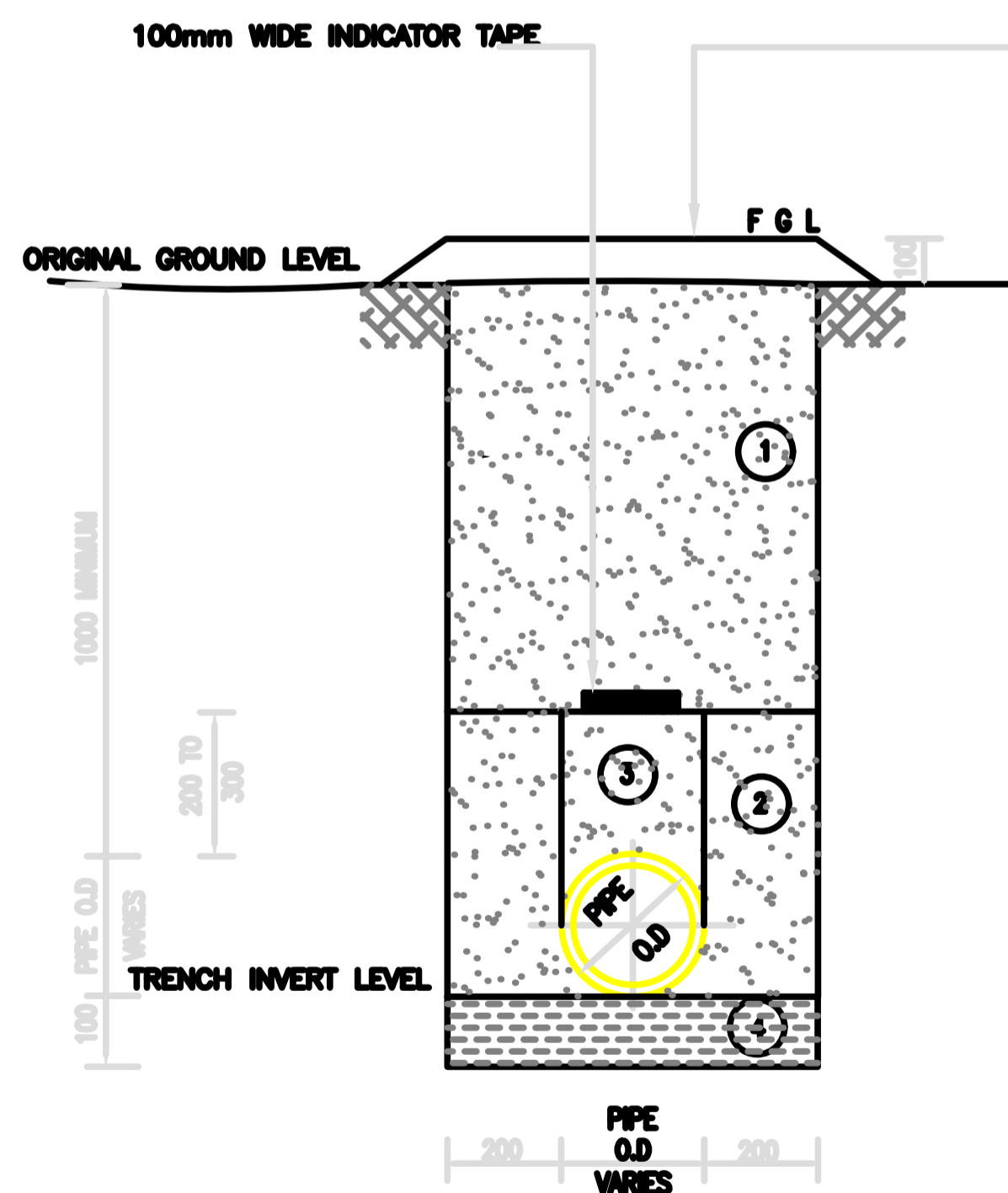


TRENCH IN ROCK
N.T.S



PIPE BEDDING DETAIL IN BLACK COTTON SOIL
N.T.S

STEEL/GI PIPE DETAILS



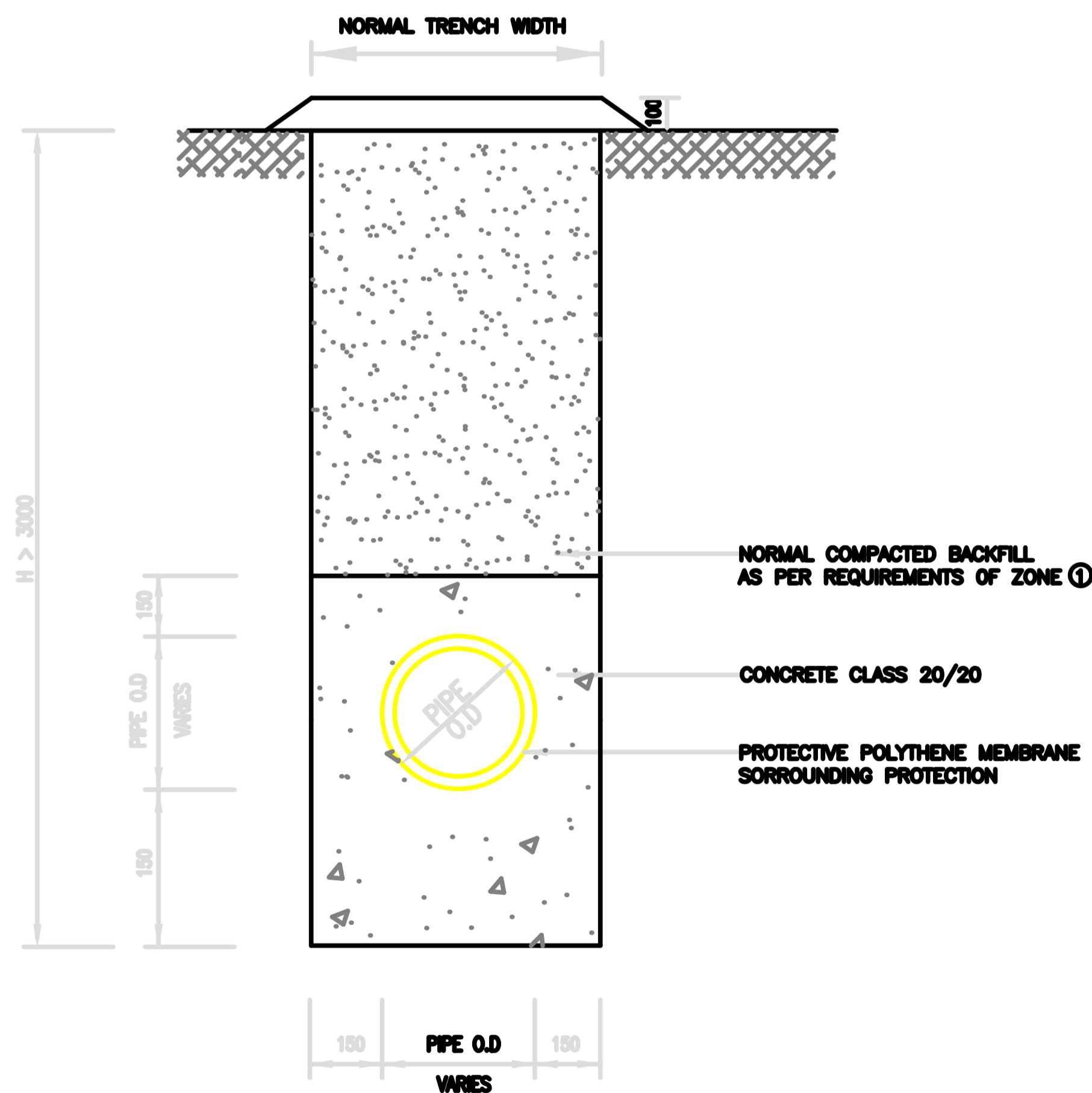
TYPICAL TRENCH FOR HDPE PIPES
N.T.S

ADDITIONAL COMPACTED FILL FOR ANY SETTLEMENT
(SIMILAR SOIL TO ZONE 1)

- ZONE ① SOILS TO BE USED MAY INCLUDE FREE - DRAINING, COARSE SAND, GRAVEL, LOAM AND SOIL OF A FRIBLE NATURE. PRACTICAL SIZE NOT TO EXCEED 20mm. BACKFILL IN LAYERS NOT EXCEEDING 300MM UPTO FINISHED GROUND LEVEL, EACH LAYER BEING WELL COMPACTED TO LIMIT VOIDS MECHANICAL COMPACTION EQUIPMENT MAY BE USED IF APPROVED BY THE ENGINEER.
- ZONE ② BACKFILL WITH SOIL APPROVED BY THE ENGINEER, IN LAYERS NOT EXCEEDING 150MM. THOROUGHLY COMPACT SOIL, TAMPING EQUALLY ON EITHER SIDE AND ALONG LOWER EDGE OF PIPE. ONLY HAND TAMPING TO BE USED.
- ZONE ③ SIMILAR REQUIREMENTS TO ZONE ② EXCEPT NO EXCESS TAMPING IS PERMITTED OVER PIPE.
- ZONE ④ IF ROCK SHARP, PROJECTIONS, TREE ROOTS OR OTHER UNSUITABLE MATERIAL IS ENCOUNTERED AT TRENCH INVERT LEVEL, A FURTHER 100MM DEPTH OF MATERIAL IS TO BE EXCAVATED. BACKFILL WITH SOIL APPROVED BY THE ENGINEER UPTO TRENCH INVERT LEVEL. THOROUGHLY COMPACT SOIL BY HAND TO GIVE A UNIFORM GRADIENT ALONG PIPE TRENCH, LEAVING RECESSES FOR PIPE JOINTS.

IN CASE OF ROCK AT TRENCH BOTTOM

HDPE MAIN TRENCH DETAILS



CONCRETE PROTECTION TO HDPE PIPES LAID AT DEPTHS GREATER THAN 3.0m
N.T.S

NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED.
2. ALL PIPES TO BE LAID WITH A MINIMUM COVER OF 0.6M AND MINIMUM SLOPE OF 1:400.
3. THE MINIMUM TRENCH WIDTH TO BE 800mm.
4. TRENCH SIDE SLOPE TO BE AT CONTRACTORS DISCRETION DEPENDING ON STABILITY OF EXCAVATED SURFACES AND ENSURING SAFETY OF LABOUR AT WORK. HOWEVER SITE QUANTITIES TO BE MEASURED BASED ON NOMINAL TRENCH WIDTH.
5. GRANULAR MATERIAL TO BE APPROVED BY THE ENGINEER AND SHALL NOT HAVE ANY GRAINS OF SIZE GREATER THAN 10mm AND FINES LESS THAN 0.05mm
6. FOR PURPOSES OF TRENCH BACKFILLING ALL EXCAVATED TRENCHES WITH CORAL MATERIAL AT THE BED SHALL BE CONSIDERED AS ROCK

BY	CHECKED
C	BY
B	CHECKED
A	BY
REV	CHECKED
REVISIONS	Drq. No.

CLIENT:

 MATHIRA WATER AND SANITATION COMPANY LTD
 P.O BOX 1981 - 10101
 KARATINA, NYERI

PROJECT:
 IMPROVEMENT OF WATER SUPPLY TO KIRIMUKUYU WARD MATHIRA WEST SUB - CONTY

KIAMUCHERU_MUBERETHI
 RAW WATER GRAVITY MAINLINE

Designed by: -- Drawn by: --
 Checked by: -- Approved by: --

TITLE:
 TYPICAL PIPE TRENCH AND BACKFILL DETAILS

Scale: AS SHOWN Date: OCTOBER 2023
 Job No. CAD FILE No.
 STATUS: DRAWING No. MAWASCO/KM/01 REV