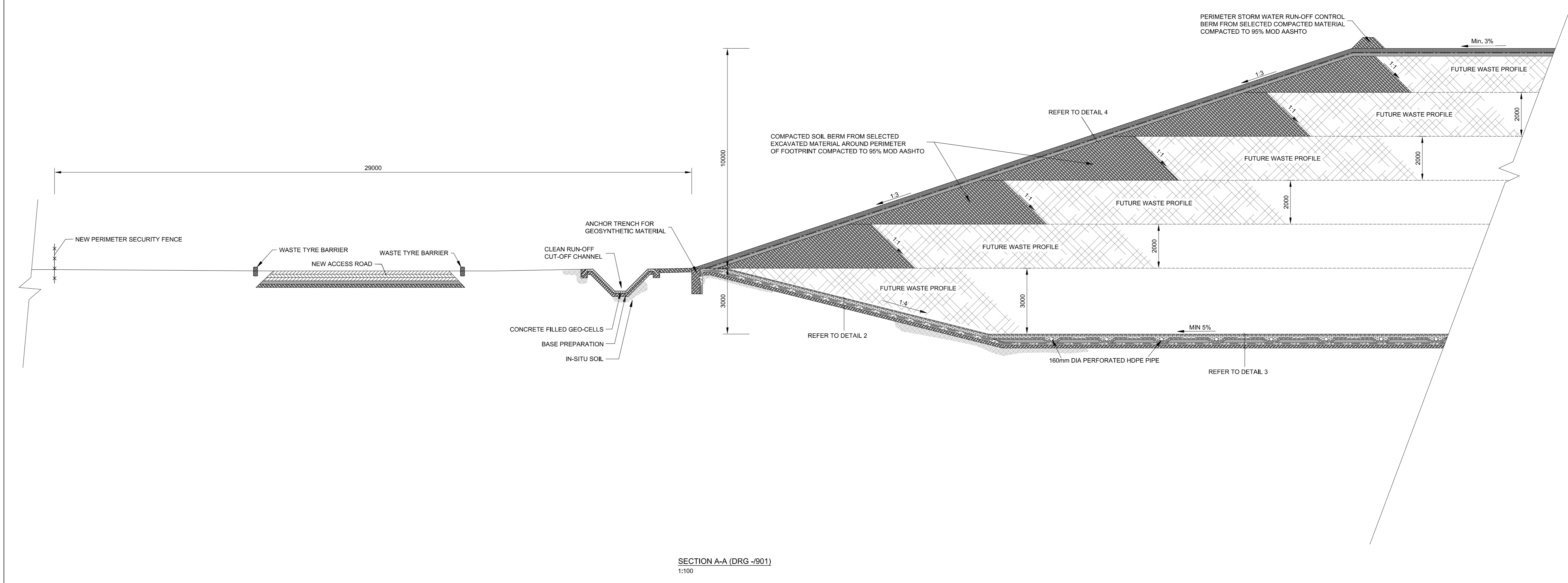
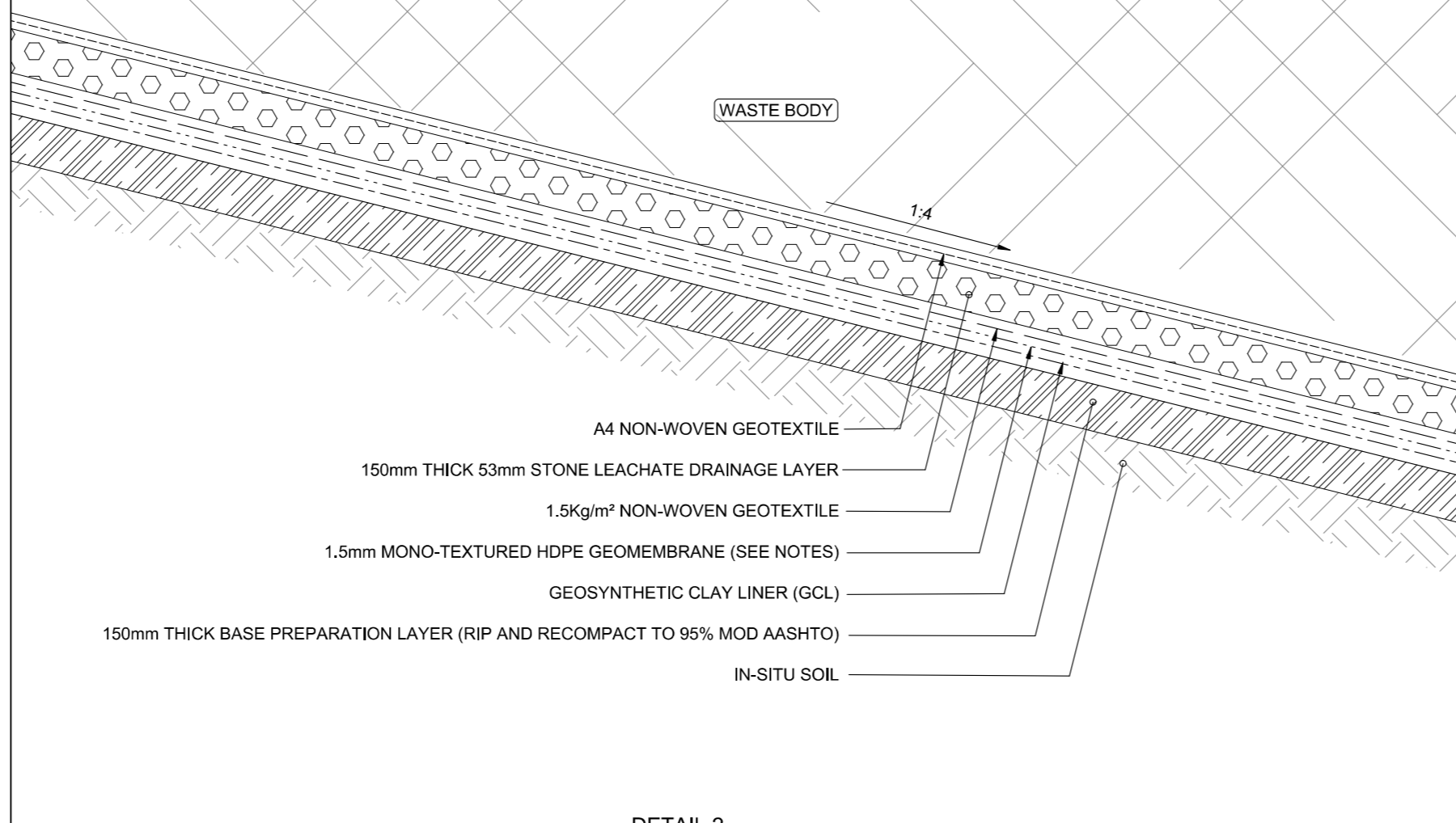


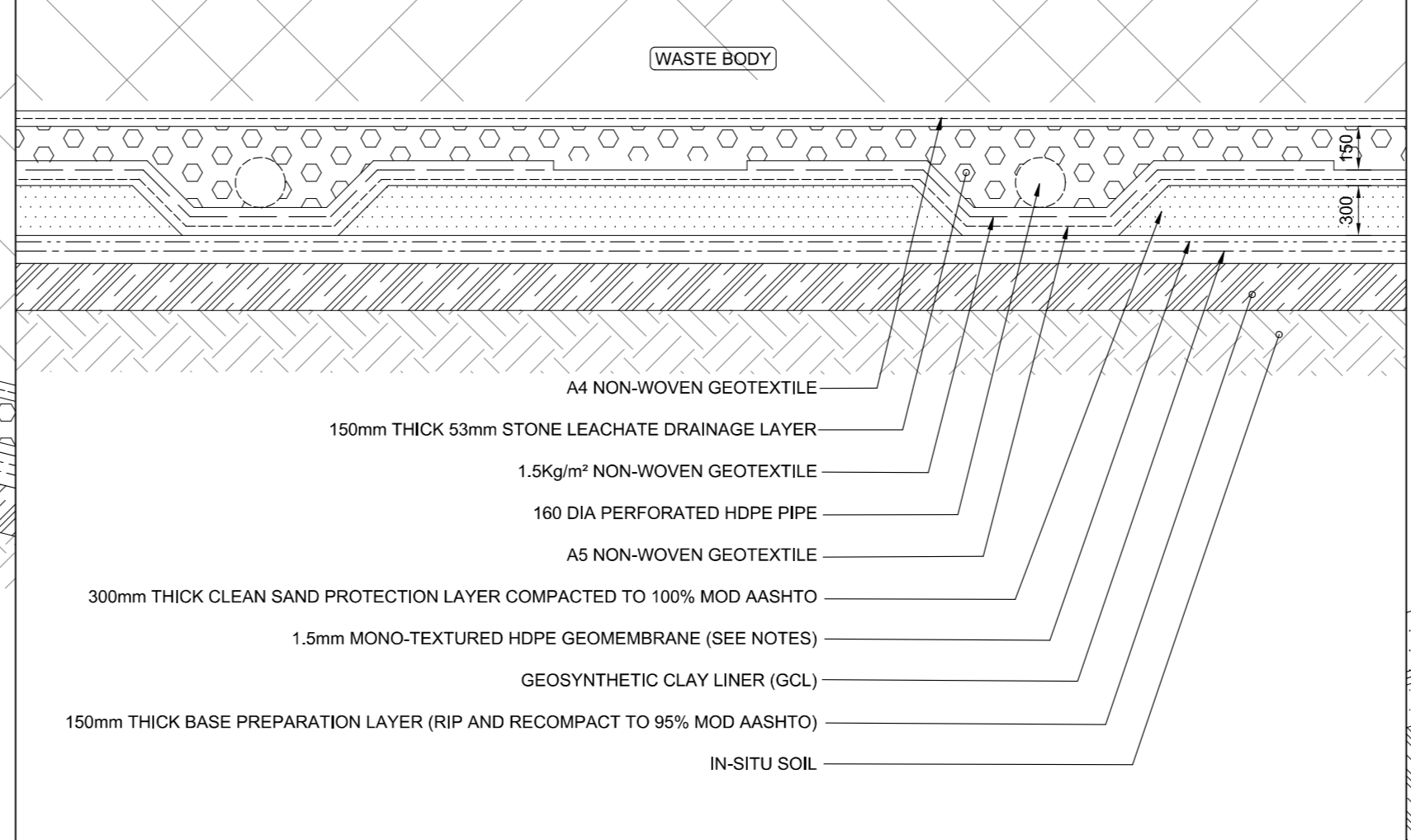
DETAIL 1 - TYPICAL LEACHATE COLLECTION & DETECTION SUMP LAYOUT
1:250



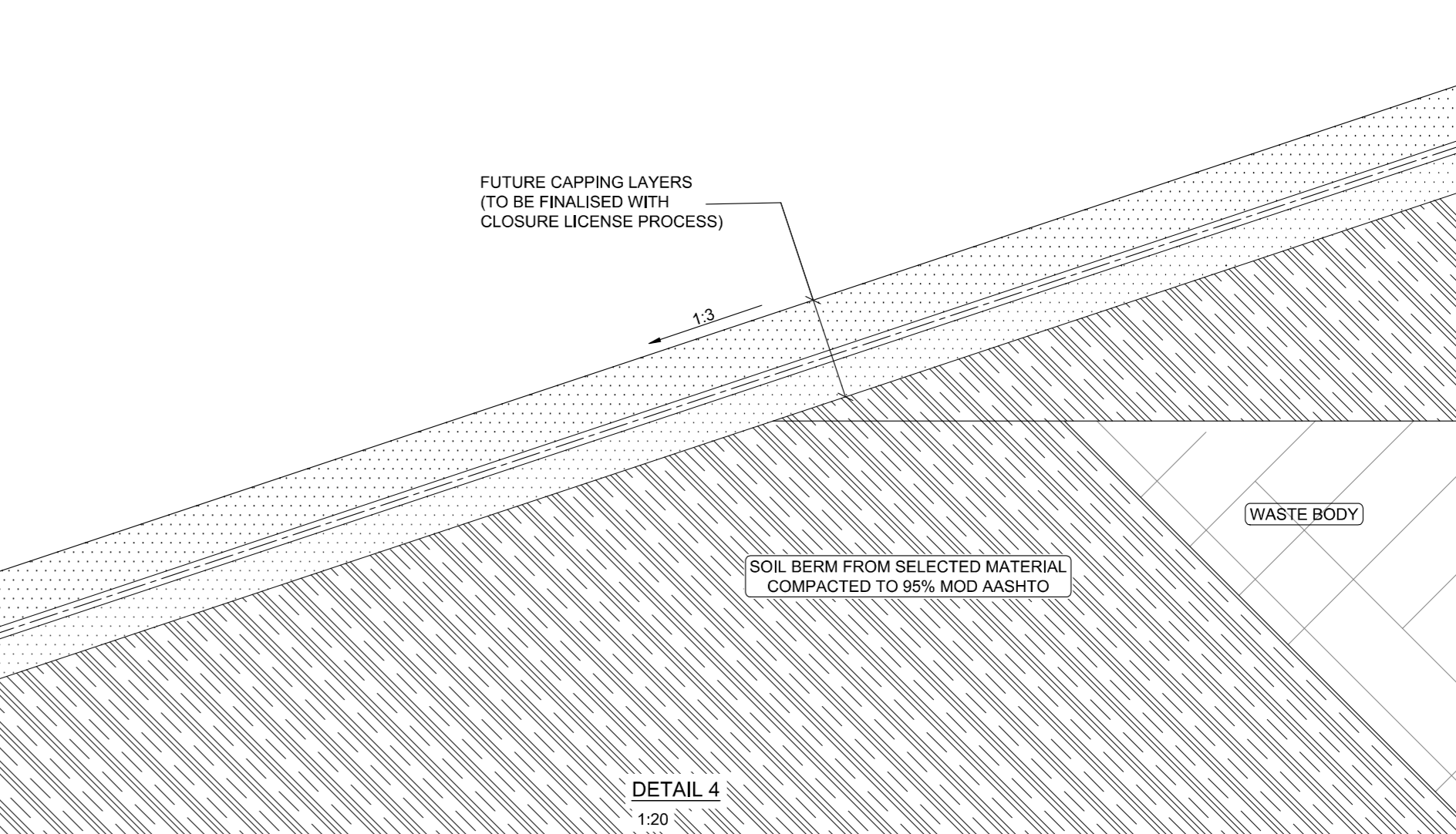
SECTION AA (DRG -901)
1:100



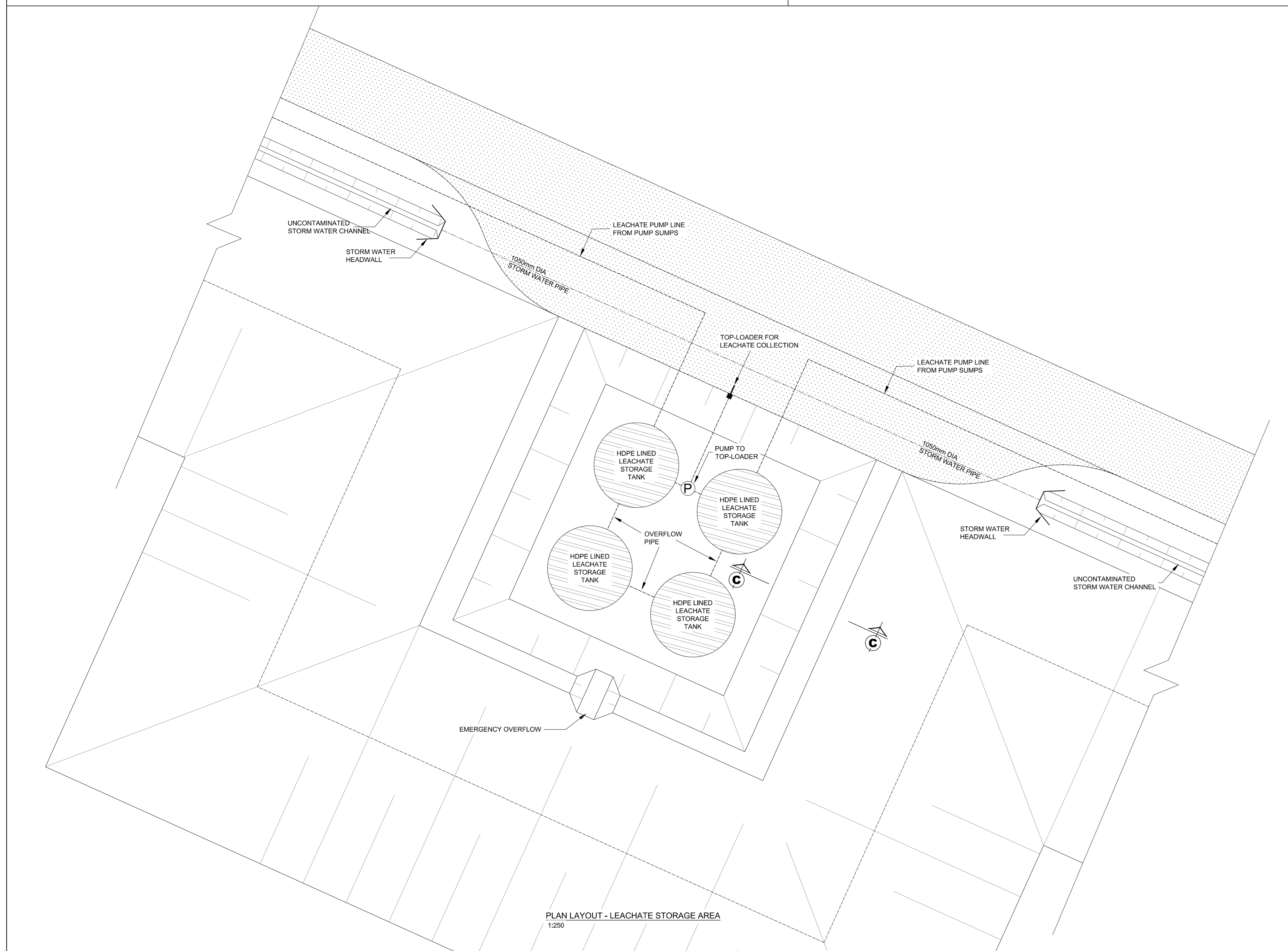
DETAIL 2
1:20



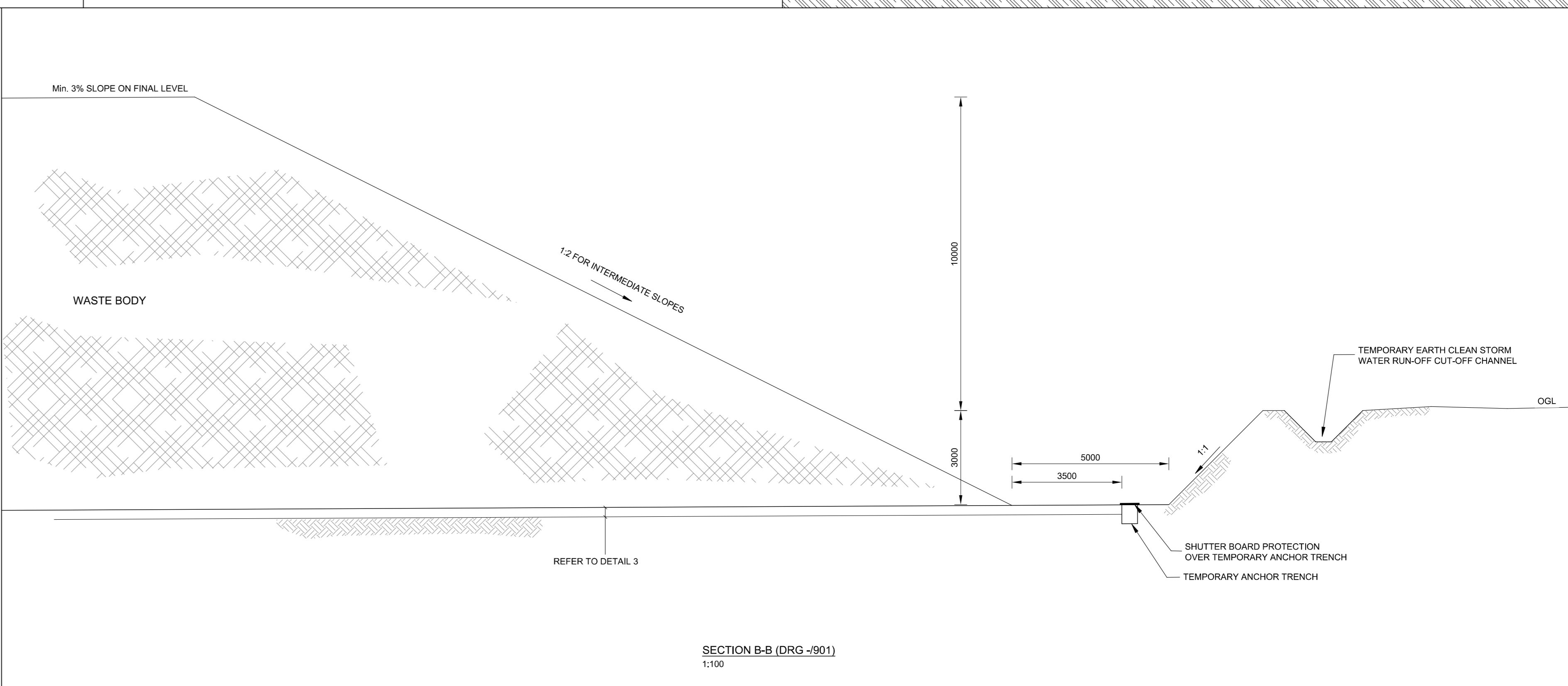
DETAIL 3
1:20



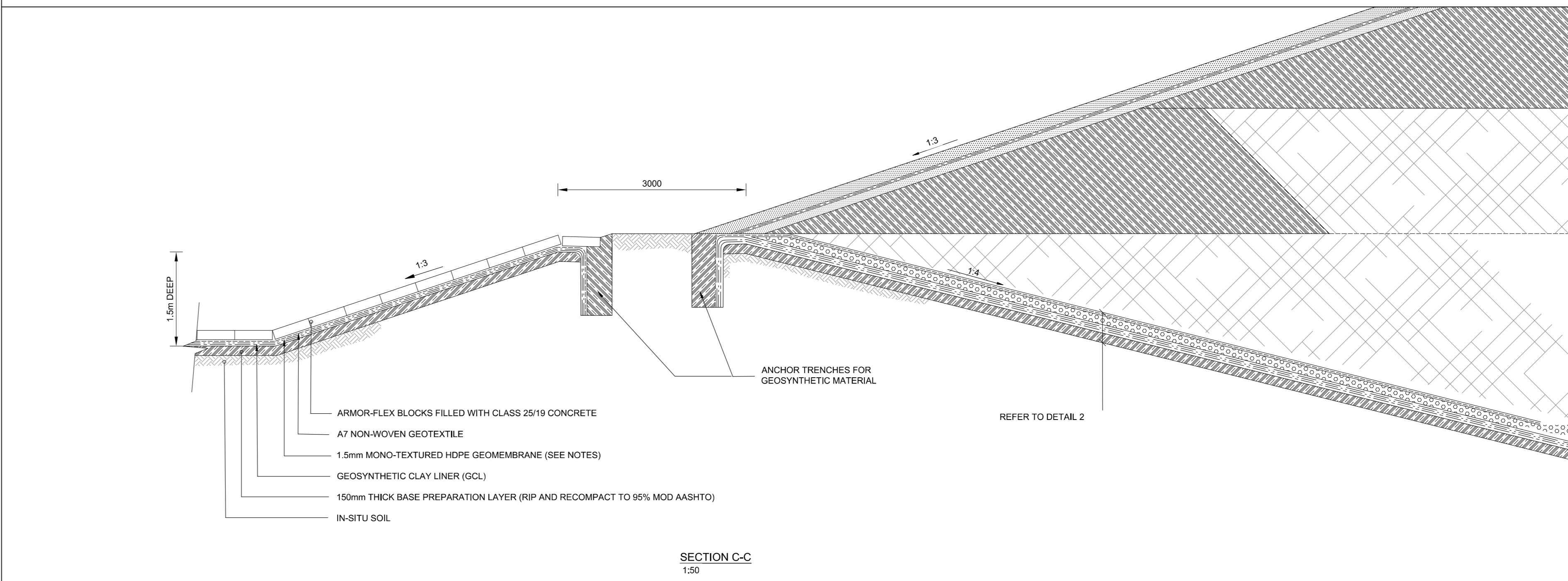
DETAIL 4
1:20



PLAN LAYOUT - LEACHATE STORAGE AREA
1:250



SECTION B-B (DRG -901)
1:100



SECTION C-C
1:50

NOTES:

- 1.1 THICKNESS, TO BE MINIMUM, NOT NOMINAL.
- 1.2 MINIMUM ASPHYXTY HEIGHT 0.2mm AS PER ASTM D7468 UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 1.3 TEXTURING IS TO BE EMBOSSED UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 1.4 BREAK ELONGATION TO BE MINIMUM 400% AS PER ASTM D6903 TYPE IV.
- 1.5 PUNCTURE RESISTANCE TO BE MINIMUM 450 N FOR 1.5mm AND 600 N FOR 2mm AS PER ASTM D4833.
- 1.6 STANDARD OIT TO BE 200 MINUTES AS PER ASTM D3895.
- 1.7 HP OIT TO BE 600 MINUTES AS PER ASTM D5885.
- 1.8 THE FOLLOWING DURABILITY TESTS TO BE DONE AND APPROVED PRIOR TO SHIPMENT AND ALSO ON ARRIVAL OF MATERIAL ON SITE.

PARAMETER	METHOD
THICKNESS	ASTM D5594
DENSITY	ASTM D1505
CARBON BLACK CONTENT	ASTM D1103
CARBON BLACK DISPERSION	ASTM D5596
STRESS CRACK RESISTANCE	ASTM D6397
TENSILE PROPERTIES	ASTM D6903
OXYDATIVE INDUCTION TIME (OIT)	ASTM D3895
HIGH PRESSURE OIT	ASTM D5885
ASPHYXTY HEIGHT	ASTM D7466

- 1.9 THE FOLLOWING DURABILITY TESTS TO BE CONDUCTED AS SOON AS MATERIAL IS MANUFACTURED:
 - OVEN AGING AT 85°C (ASTM D5721)
 - STANDARD OIT 50% RETAINED AFTER 90 DAYS (ASTM D3895)
 - OVEN AGING AT 80°C (ASTM D5721)
 - HIGH PRESSURE OIT 80% RETAINED AFTER 90 DAYS (ASTM D5885)
 - UV RESISTANCE HIGH PRESSURE OIT 50% RETAINED AFTER 1600 HRS (ASTM D5885)

2. GEOTEXTILES

GEOTEXTILES TO CONFORM TO GR-G12(A)

CONFORMANCE TESTING OF THE 1500 g/m² GEOTEXTILE TO BE DONE AND APPROVED DURING MANUFACTURING AND ALSO ON ARRIVAL OF MATERIAL ON SITE.

THE FOLLOWING CONFORMANCE TESTS TO BE DONE:

PARAMETER	METHOD
THICKNESS	ASTM D5199
MASS / UNIT AREA	ASTM D2031

3. GEOSYNTHETIC CLAY LINER (GCL)

GCL TO CONFORM TO GR-GCL3

BENTONITE TO BE NATURAL SODIUM BENTONITE POWDER

DRAWING STATUS			
DISCRIPTION	DATE		
X FOR APPROVAL	11/2014		
TENDER ONLY			
ISSUED FOR CONSTRUCTION			
AS BUILT			

No.	Date	Revision	Initial

CLIENT
CAPE WINELANDS DISTRICT MUNICIPALITY

PROJECT
CWDM REGIONAL SITE: EAST

DRAWING TITLE
SECTIONS & DETAILS SITE: E

DATE: NOV 2014
SCALE: AS SHOWN

SPECIALIST CONSULTING ENGINEERS
JAN PALM CONSULTING ENGINEERS

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ENGINEER	DESIGNED	DRAWN	CHECKED	TRACED
J PALM	J GENIS	J GENIS	W VISSER	*****

DRAWING NO. **A159/EAST/902**
CONTRACT NO. *****
REVISION NO. *****
REFERENCE NO. *****