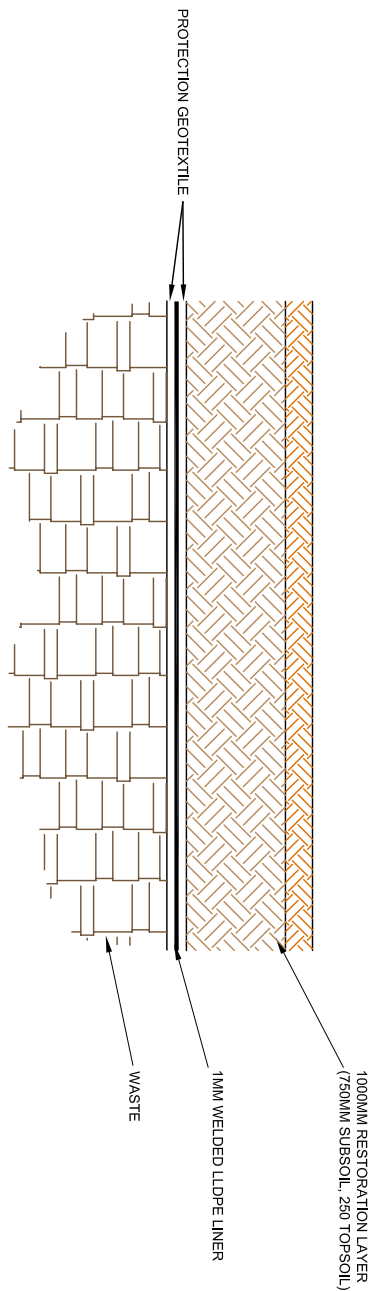
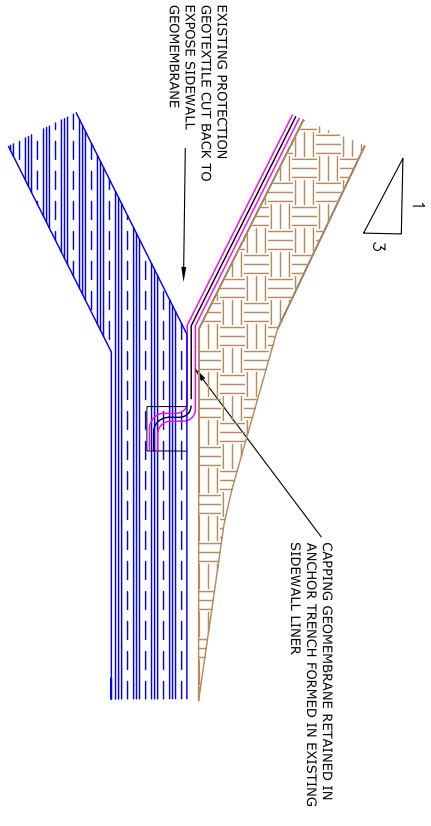


| PHASE REFERENCE | WASTE CATEGORY | BASAL ENGINEERING | SIDEWALL ENGINEERING | LEACHATE DRAINAGE SYSTEM | CAPPING SYSTEM |
|-----------------|----------------|---------------------------|---|---------------------------|---|
| CELL 1 | NON-HAZARDOUS | COMPLETE (REFER TO ESD6A) | COMPLETE (REFER TO ESD6A) | COMPLETE (REFER TO ESD6A) | - 100MM RESTORATION SOILS - GEOTEXTILE PROTECTION LAYER - 1MM LOPE - GEOTEXTILE PROTECTION LAYER |
| CELL 2 | NON-HAZARDOUS | COMPLETE (REFER TO ESD6A) | - 1M ENGINEERED MINERAL LINER (COMPACTED CLAY <5.5X10 N/5) - 2mm HDPE GEOTEXTILE - 100MM GEOTEXTILE WITH GEOTEXTILE | COMPLETE (REFER TO ESD6A) | - 100MM RESTORATION SOILS - GEOTEXTILE PROTECTION LAYER - 1MM LOPE - GEOTEXTILE PROTECTION LAYER |
| CELL 3 | | | | | |

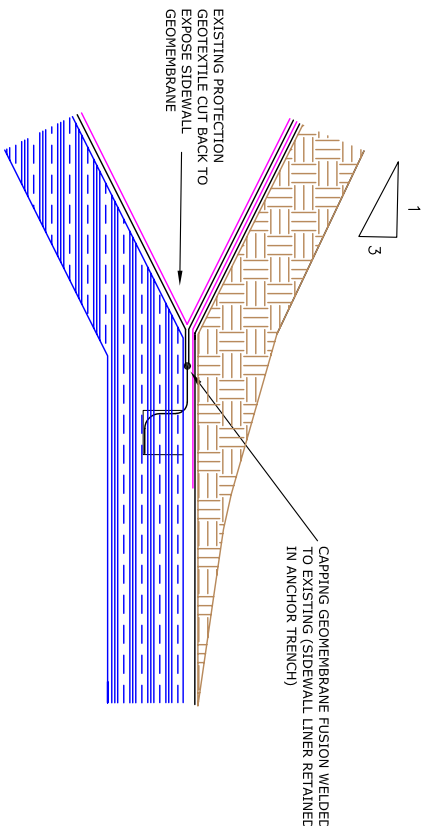
ENGINEERING DETAILS FOR PROPOSED OPERATIONAL AREAS



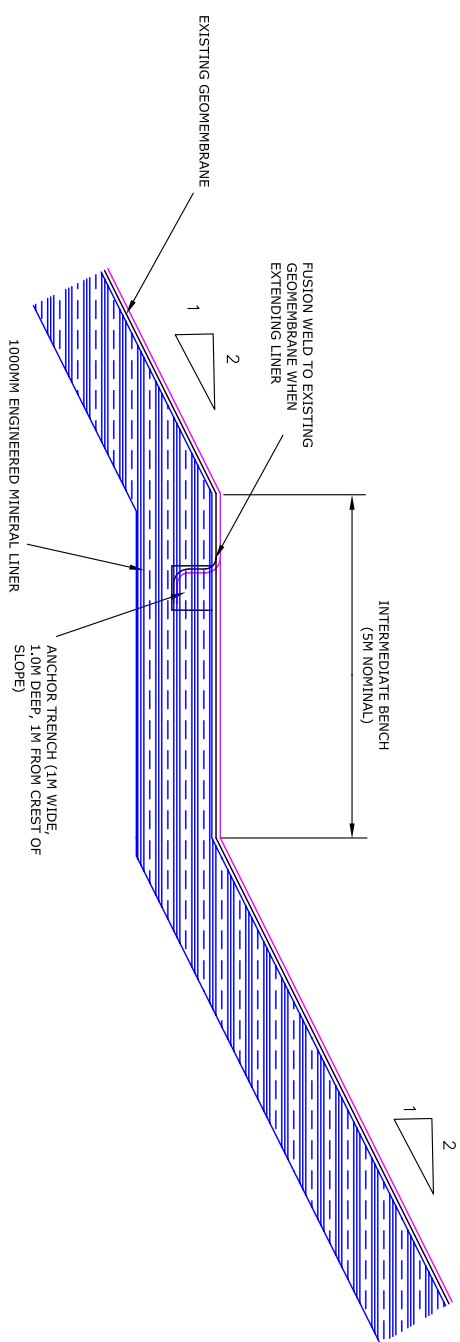
TYPICAL CAPPING DETAIL (N.T.S)



TYPICAL CAPPING / SIDEWALL LINER (MINERAL ONLY) CONNECTION DETAIL (SECTION A-A') (SCALE 1:100)



TYPICAL CAPPING / SIDEWALL LINER (GEOMEMBRANE) CONNECTION DETAIL (SECTION B-B') (SCALE 1:100)



TYPICAL BASAL AND SIDE LINER DETAIL - CELLS 2 & 3 (SECTION C-C') (SCALE 1:100)

- NOTES
1. REDUCED FROM THE ORIGINATE SURVEY 1:50 000
 2. FOR DETAILS OF SITE INFRASTRUCTURE AREA SEE DRG ESD6A.
 3. PROTECTION GEOTEXTILE MAY BE REPLACED WITH UPPER AND LOWER PROTECTION LAYERS.

LEGEND

- INSTALLATION BOUNDARY
- SW SETTLEMENT LAGOONS
- GRASS PLOTS
- EXTENT OF HDPE GEOMEMBRANE (SIDEWALL LINERS)

ENCIA CONSULTING LIMITED
ENCIA HOUSE, AUDRY LANE
WETHERBY, WEST YORKSHIRE
TEL: - 01937 589555 FAX: - 01937 589944

3 Salfords Court
White Rose Way
Doncaster
South Yorkshire
DN4 5NU

PEN-Y-BONT LANDFILL SITE
PPC PERMIT APPLICATION

INSTALLATION DETAILS
PROPOSED

| | | | |
|----------|-----------|---------|-------------|
| DRAWN | SIGNATURE | DATE | STATUS |
| D.C | | 9/11/04 | FOR COMMENT |
| APPROVED | SIGNATURE | DATE | DATE |
| S.W | | 9/11/04 | FINAL |

| | | | |
|----------|-------|--------------|----------|
| SCALE | SHEET | DRAWING NO. | REVISION |
| AS SHOWN | A1 | WR4446/ESD6B | |