DETAIL A1

GEOTEXTILE WRAP EMBEDDED INTO EMBANKMENT TO PREVENT PREFERENTIAL FLOW ALONG EDGE OF GABION BASKET

20-40MM FILTRATION STONE PLACED PRIOR TO GABIONS

INITIAL STILLING CHECK DAM CONSTRUCTED FROM 20-40MM CLEAN STONE CORE WITH 200MM COVER OF 100MM SINGLE SIZE STONE

ACCESS TRACK

1000
1000
10000
1400
4000
4000
6250

INLET
- DIVERT ROADSIDE DITCH INTO SETTLEMENT POND

OVERFLOW DISCHARGE TO COLLECTOR DITCH

EXTEND BOUNDARY BERMS TO PREVENT OVERFLOW

SWALE TO BE WIDENED AT ENTRY TO POND

GEOTEXTILE WRAP

100MM SINGLE SIZED STONE PLACED AT ENTRANCE TO SETTLEMENT POND AND AND WITHIN FOREBAY AREA
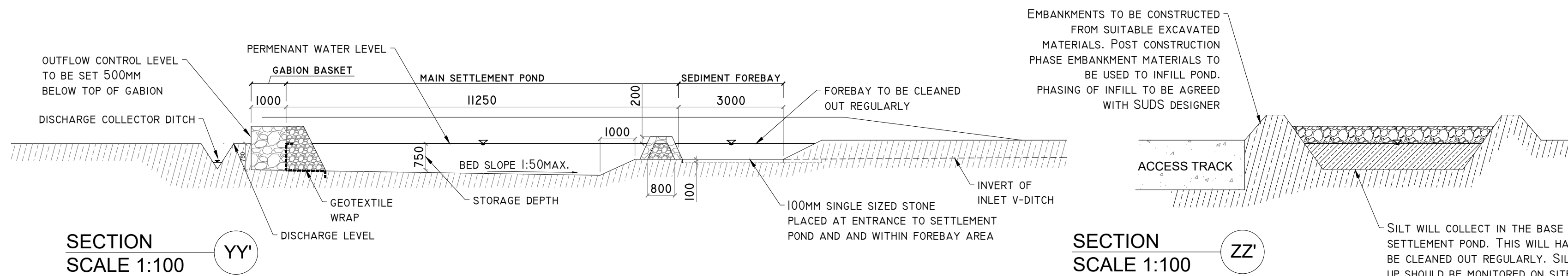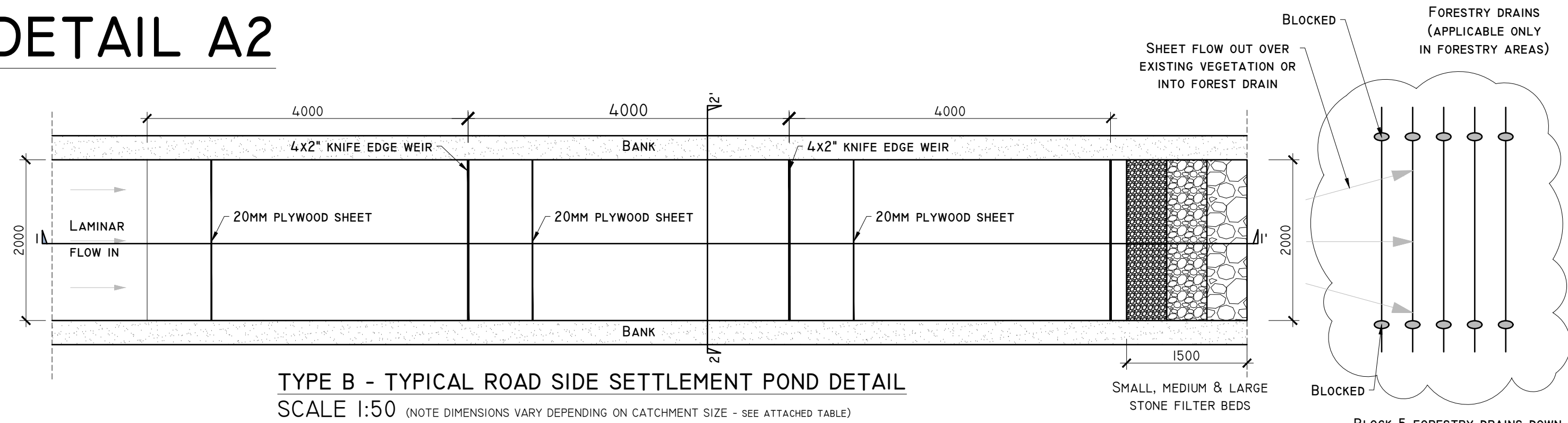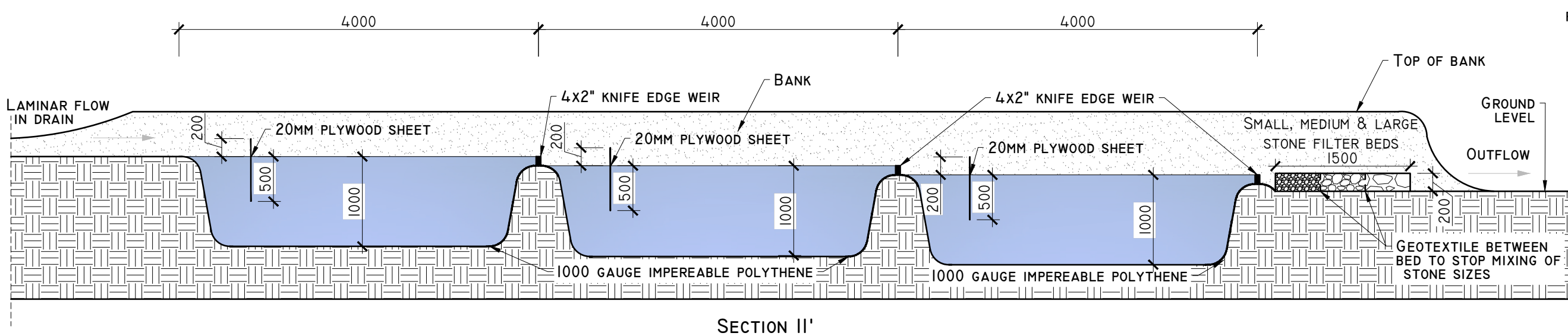
TYPE A - TYPICAL ROAD SIDE SETTLEMENT POND DETAIL
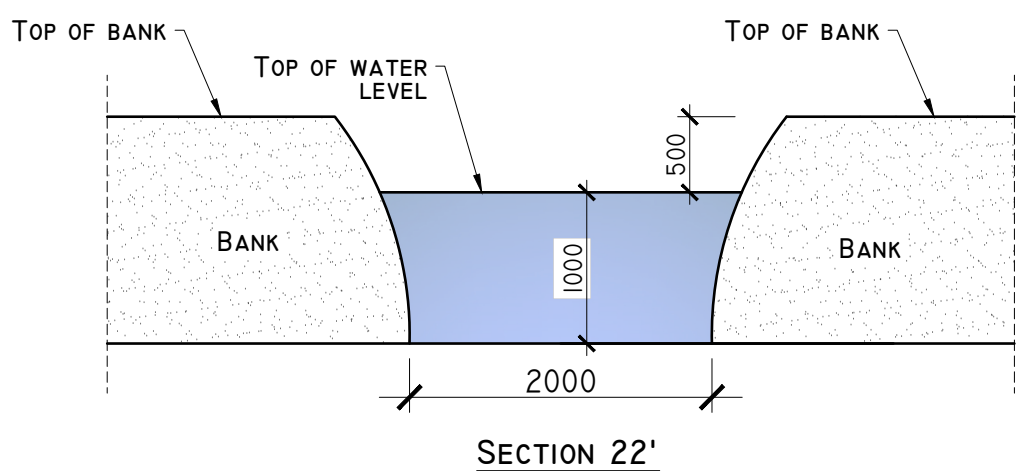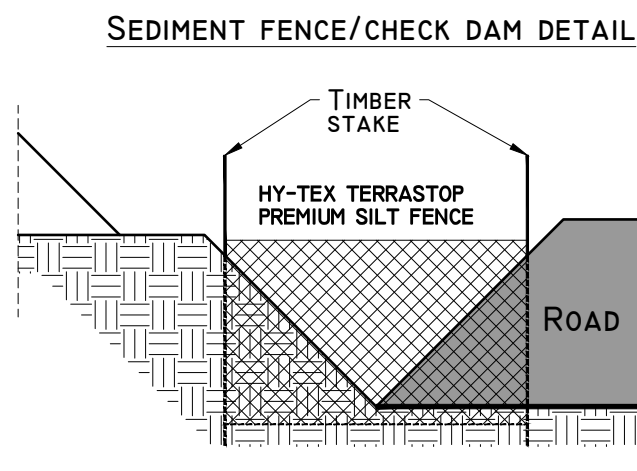SCALE 1:100 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)

OUTFLOW CONTROL LEVEL TO BE SET 500MM BELOW TOP OF GABION

PERMANENT WATER LEVEL

GABION BASKET

MAIN SETTLEMENT POND

SEDIMENT FOREBAY

DISCHARGE COLLECTOR DITCH

EMBANKMENTS TO BE CONSTRUCTED FROM SUITABLE EXCAVATED MATERIALS. POST CONSTRUCTION PHASE EMBANKMENT MATERIALS TO BE USED TO INFILL POND. PHASING OF INFILL TO BE AGREED WITH SUDS DESIGNER

FOREBAY TO BE CLEANED OUT REGULARLY

ACCESS TRACK

1000
11250
200
3000
750
1000
800
100

BED SLOPE 1:50MAX.

GEOTEXTILE WRAP

DISCHARGE LEVEL

STORAGE DEPTH

100MM SINGLE SIZED STONE PLACED AT ENTRANCE TO SETTLEMENT POND AND AND WITHIN FOREBAY AREA

INVERT OF INLET V-DITCH

SILT WILL COLLECT IN THE BASE OF THE SETTLEMENT POND. THIS WILL HAVE TO BE CLEANED OUT REGULARLY. SILT BUILD UP SHOULD BE MONITORED ON SITE.

SECTION YY'
SCALE 1:100

SECTION ZZ'
SCALE 1:100

DETAIL A2

4000
4000
4000

4x2" KNIFE EDGE WEIR
BANK
4x2" KNIFE EDGE WEIR

LAMINAR FLOW IN

20MM PLYWOOD SHEET
20MM PLYWOOD SHEET
20MM PLYWOOD SHEET

2000

BANK

SMALL, MEDIUM & LARGE STONE FILTER BEDS

1500

SHEET FLOW OUT OVER EXISTING VEGETATION OR INTO FOREST DRAIN

FORESTRY DRAINS (APPLICABLE ONLY IN FORESTRY AREAS)

Blocked

Blocked

BLOCK 5 FORESTRY DRAINS DOWN SLOPE OF A OUTLET TO PREVENT POLLUTION TO RECEIVING WATERS

TYPE B - TYPICAL ROAD SIDE SETTLEMENT POND DETAIL
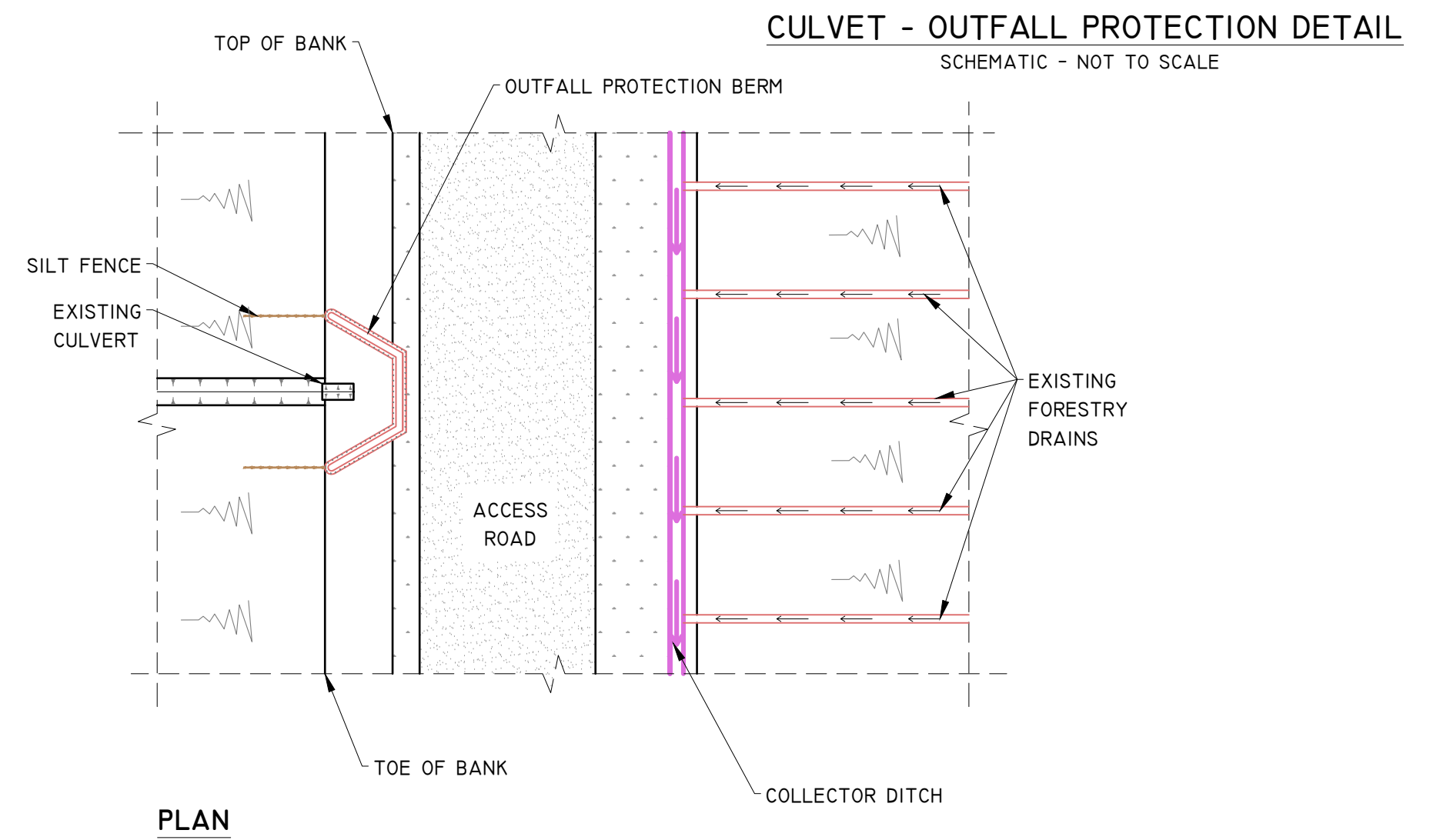SCALE 1:50 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)

4000
4000
4000

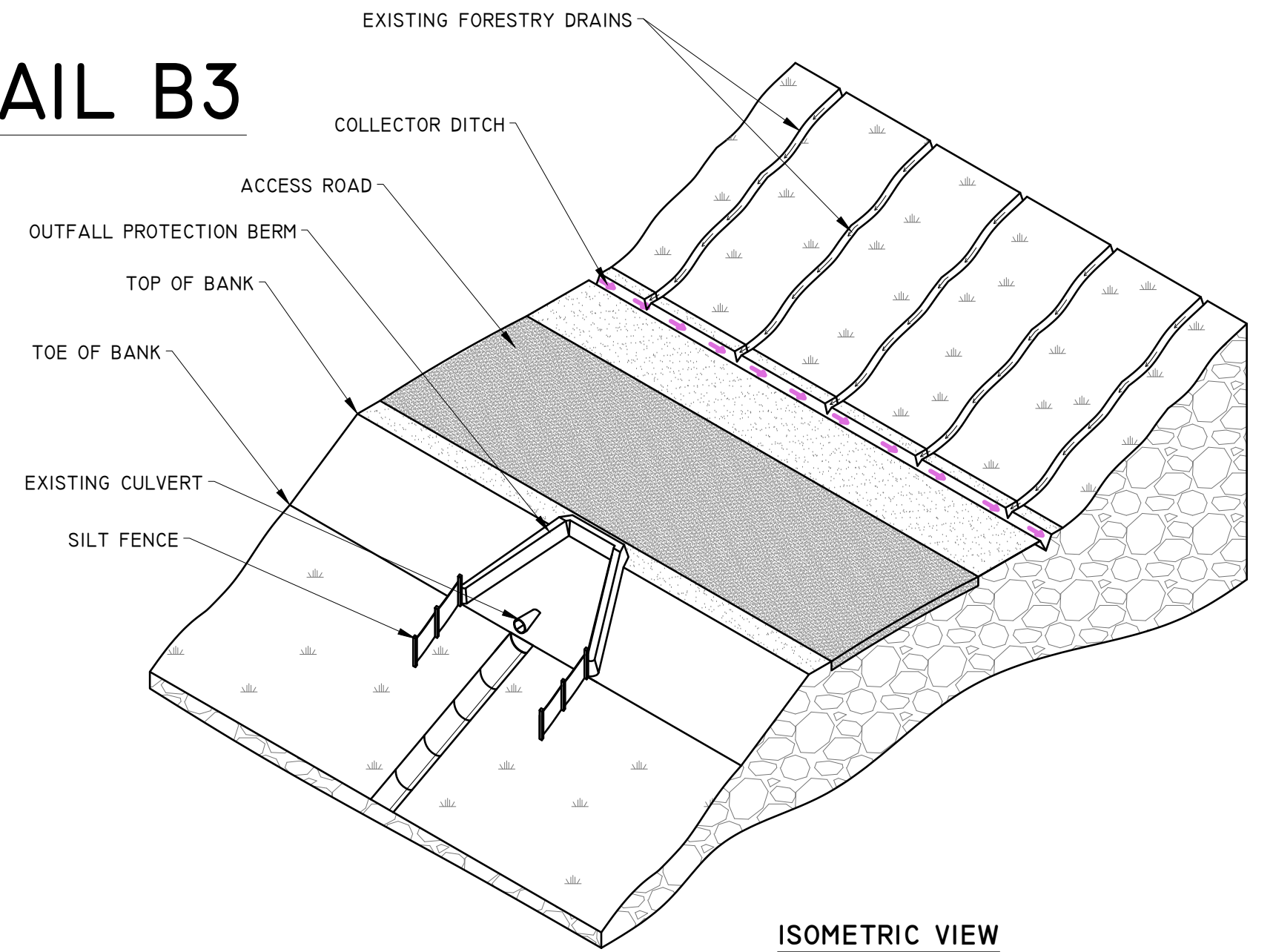4x2" KNIFE EDGE WEIR
BANK
4x2" KNIFE EDGE WEIR

LAMINAR FLOW IN DRAIN

200
500
1000
200
500
1000
200
500
1000

20MM PLYWOOD SHEET
20MM PLYWOOD SHEET
20MM PLYWOOD SHEET

1000 GAUGE IMPERMEABLE POLYTHENE
1000 GAUGE IMPERMEABLE POLYTHENE

SMALL, MEDIUM & LARGE STONE FILTER BEDS
1500

TOP OF BANK
GROUND LEVEL
OUTFLOW

GEOTEXTILE BETWEEN BED TO STOP MIXING OF STONE SIZES

SECTION 11'

TOP OF BANK
TOP OF WATER LEVEL
TOP OF BANK

500
1000

BANK
BANK

2000

SECTION 22'

SEDIMENT FENCE/CHECK DAM DETAIL

TIMBER STAKE

HY-TEX TERRASTOP PREMIUM SILT FENCE

ROAD

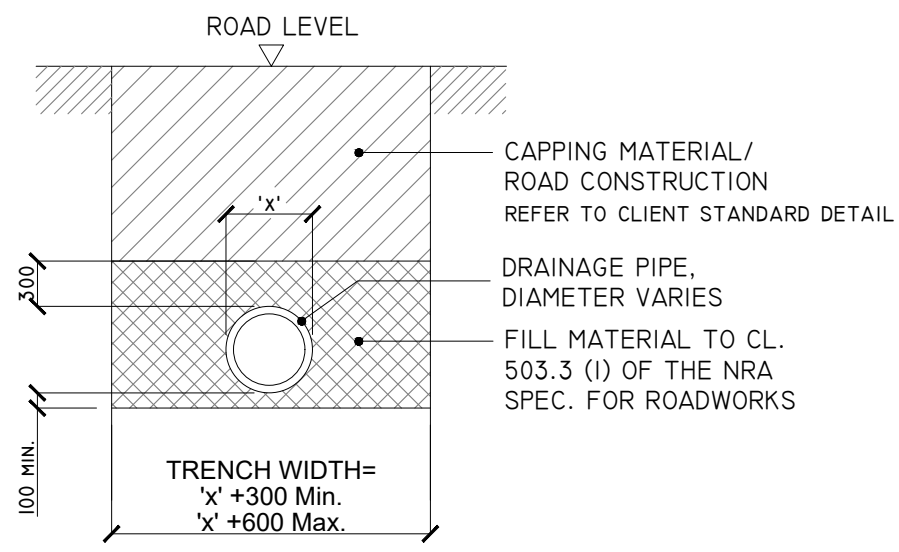| Pond Size W [m] x L [m] x D [m]			Track/Hardstand Catchment Size (m²)		
Return Period	10 Yrs	Storm Duration	500	1000	2000
6hr retention for coarse silt	6 HRS		2.5 x 7.5 x 1 m	3.5 x 12 x 1 m	6.0 x 19.8 x 1 m
11hr retention for medium silt	12 HRS		3.5 x 10.8 x 1 m	5 x 16.8 x 1 m	8.5 x 28.0 x 1 m
24hr retention for fine silt	24 HRS		5 x 15.3 x 1 m	7.3 x 23.3 x1 m	12.5 x 38 x 1 m

CULVET - OUTFALL PROTECTION DETAIL
SCHEMATIC - NOT TO SCALE

TOP OF BANK
OUTFALL PROTECTION BERM
SILT FENCE
EXISTING CULVERT
ACCESS ROAD
TOE OF BANK
EXISTING FORESTRY DRAINS
COLLECTOR DITCH

PLAN

DETAIL B3

EXISTING FORESTRY DRAINS
COLLECTOR DITCH
ACCESS ROAD
OUTFALL PROTECTION BERM
TOP OF BANK
TOE OF BANK
EXISTING CULVERT
SILT FENCE

ISOMETRIC VIEW

DETAIL B2

ROAD LEVEL

CAPPING MATERIAL/ ROAD CONSTRUCTION REFER TO CLIENT STANDARD DETAIL

DRAINAGE PIPE, DIAMETER VARIES

FILL MATERIAL TO CL. 503.3 (I) OF THE NRA SPEC. FOR ROADWORKS

TRENCH WIDTH= 'x' +300 Min. 'x' +600 Max.

'TYPE B' CULVERT - DRAINAGE CROSSING BENEATH EXCAVATED ROAD
SCALE 1:50

DETAIL B1

TRACK LEVEL

WELL COMPACTED 20MM MIN. STONE AND CHIPS BINDING (USE 5 TONNE VIBRATING ROLLER)

GEOTEXTILE MAT (E.G. ENKAGRID) 300MM RC SLAB TO ENGINEERS DESIGN AND SPECIFICATIONS

150MM SELECTED FILL OR GRANULAR FILL FREE FROM STONES LARGER THAN 40MM

GRANULAR MATERIAL SHOULD BE 10MM AGGREGATE CONFORMING TO ISS:1990 HAVING A COMPACTION FACTION OF 0.2 OR LESS WHEN TESTED IN ACCORDANCE WITH BS8310:1985 Appendix D

HALF CONCRETE PIPE 900MM DIA.

RC SUPPORTING WALL 300MM THICK TO ENGINEERS DESIGN AND SPECIFICATIONS

RC FOUNDATIONS TO BE LOCATED SO AS TO ENSURE AT LEAST 1 METRE OF CLEARANCE FROM STREAM BED

WATER LEVEL

450MM+ TO ENGINEERS SPECS.

450MM+ TO ENGINEERS SPECS.

'TYPE A' TYPICAL SECTION OF STREAM BOTTOMLESS CULVERT THRU' ROAD (WHERE APPLICABLE)
SCALE 1:50

Date	Description	Chkd	Signed
24/02/25	Planning	MG	MG

Revisions

Client:
Ecopower

Job:
Ballynalacken WF, Co. Kilkenny

Title:
Drainage Details 1

Figure No: D501

Drawing No: P1562-0-0225-A1-D501-00C

Sheet Size: A1
Project No.: P1562-0
Scale: as shown (A1)
Drawn By: MG/GA
Date: 24/02/2025
Checked By: MG