

**MATERIALS**

**GEOTEXTILE FABRIC:** NON-WOVEN FILTER CLOTH (MINIMUM 'BIDIM' A34 OR THE EQUIVALENT), WIDE STRIP TENSILE STRENGTH (AS3706.2) MINIMUM 15kN/m IN BOTH DIRECTIONS, PORE SIZE (EOS, O95, AS 3706.7) LESS THAN 110mm, MASS PER UNIT AREA (AS3706.1) MINIMUM 200GSM.

**SUPPORT POSTS/STAKES:** 1500mm<sup>2</sup> (MIN) HARDWOOD, 2500mm<sup>2</sup> (MIN) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

**BACKING MESH:** PLASTIC OR STEEL MESH WITH A MAXIMUM MESH OPENING OF 200mm.

**INSTALLATION**

1. REFER TO APPROVED PLANS FOR LOCATION, AND CONSTRUCTION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. UNLESS OTHERWISE DIRECTED BY THE RESPONSIBLE ON-SITE OFFICER, EXCAVATE A 200mm WIDE BY 200mm DEEP TRENCH ALONG THE PROPOSED ALIGNMENT OF THE FILTER FENCE, PLACING THE EXCAVATED MATERIAL UP-SLOPE OF THE FENCE.

3. IF THE FILTER FENCE IS TO BE STAKED WITHOUT A MESH BACKING, THEN SECURE THE SUPPORT POSTS INTO THE GROUND AT A SPACING NO GREATER THAN 1.5m.

4. IF THE FILTER FENCE IS TO BE STAKED WITH A MESH BACKING, SECURE THE SUPPORT POSTS INTO THE GROUND AT A SPACING NO GREATER THAN 2.0m, THEN SECURELY ATTACH THE BACKING MESH TO THE UP-SLOPE SIDE OF THE SUPPORT POSTS FROM A CONTINUOUS LENGTH OF MESH. EXTEND THE MESH INTO THE EXCAVATED TRENCH.

5. IF THE FILTER FENCE IS THE BE SUPPORTED BY STRAW BALES, THEN AFTER SUITABLE ANCHORING THE BOTTOM 300mm OF FABRIC, PLACE A CONTINUOUS ROW OF STRAW BALES IMMEDIATELY DOWN-SLOPE OF THE FABRIC AND WRAP THE FABRIC OVER THE TOP OF THE STRAW BALES. SECURELY ANCHOR THE FILTER FENCE WITH A SINGLE STAKE DRIVEN THROUGH THE FABRIC AND CENTRE OF EACH BALE.

6. USING A CONTINUOUS LENGTH OF NON-WOVEN GEOTEXTILE, SECURELY ATTACH THE FABRIC TO THE UP-SLOPE SIDE OF THE SUPPORT POSTS OR BACKING MESH, WITH THE FABRIC EXTENDED AT LEAST 200mm INTO THE TRENCH.

7. BACKFILL THE TRENCH AND TAMP THE FILL TO FIRMLY ANCHOR THE BOTTOM OF THE FABRIC TO PREVENT DISPLACEMENT OF THE FABRIC AND TO PREVENT THE FREE MOVEMENT OF WATER UNDER THE FABRIC.

8. IN ALL CASES, INSTALL THE FILTER FENCE IN A MANNER THAT WILL MINIMISE THE RISK OF SEDIMENT-LADEN WATER FLOWING AROUND THE FENCE.

**MAINTENANCE**

1. INSPECT THE FILTER FENCE REGULARLY AND AT LEAST DAILY DURING DE-WATERING OPERATIONS. MAKE REPAIRS AS NEEDED TO THE FABRIC AND SUPPORT FRAME.

2. INSPECT THE FABRIC FOR OBVIOUS LEAKS RESULTING FROM HOLES, TEARS OR JOINT FAILURE IN THE FABRIC.

3. CHECK THAT WATER HAS NOT OVERTOPPED THE FENCE AT LOW POINTS.

4. REPAIR ANY TORN SECTIONS WITH A CONTINUOUS PIECE OF FABRIC PLACED INSIDE THE OLD FABRIC, EXTENDING AT LEAST FROM SUPPORT POST TO SUPPORT POST.

5. CHECK FOR MATERIALS LEANING UP AGAINST THE FILTER FENCE. MAKE REPAIRS AS NEEDED TO THE FABRIC AND SUPPORT FRAME.

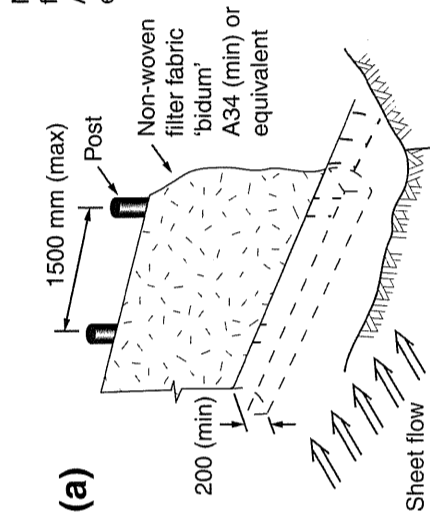
**REMOVAL**

1. REMOVE ALL ACCUMULATED SEDIMENT AND DISPOSE OF IT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

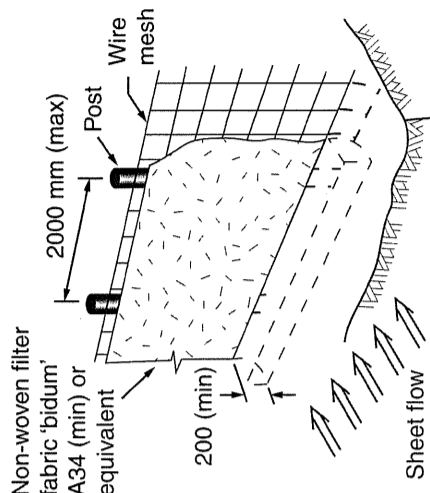
2. REMOVE ALL MATERIALS AND REPAIR DAMAGE TO THE GROUND SURFACE AS NECESSARY.

3. APPROPRIATELY REHABILITATE (E.G. REVEGETATE) THE GROUND AS NECESSARY TO MINIMISE THE RISK OF AN ONGOING EROSION HAZARD.

**(a)**



**(b)**



NOTE: LIMIT DESIGN FLOWS TO 40l/s AND CATCHMENT TO 0.6Ha/100m OF FENCE.

SHEET 1 OF 1		WORKS JOB No. -		DRAWING No. AMEND. A	
<b>FILTER FENCE</b>					
		<b>Mackay REGIONAL COUNCIL</b>			
DRAWN PDG		SIGNED PDG		DATE 12/12/11	
DESIGNED PDG		SIGNED PDG		DATE 12/12/11	
CHECKED		SIGNED		DATE	
MANAGER TECHNICAL SERVICES		G. Hawes		12/12/11	
MERIDIAN MGA 55		LEVEL DATUM AHD		DATE	
FILE NAME DESIGN\DOCUMENTS\SECS STD DRAWINGS\...		G. HAWES RPEQ 5693		STUART HOLLEY RPEQ 8040	
AMENDMENTS AND REVISIONS		DIRECTOR ENGINEERING SERVICES		DATE 20.12.11	
NO. DATE		S.M. HOLLEY		DATE	