

### PREPARATION

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

2. TAKE ALL NECESSARY STEPS TO ENSURE DISTURBANCE TO THE GRASS FILTER BED IS MINIMISED THROUGHOUT THE TIME IT IS USED AS A SEDIMENT TRAP.

3. TO THE MAXIMUM DEGREE PRACTICAL, ENSURE FLOW PASSING THROUGH THE GRASS FILTER BED IS NOT ALLOWED TO CONCENTRATE WITHIN DRAINAGE DEPRESSIONS, SWALES, RILLS OR WHEEL TRACKS.

4. ENSURE FLOW ENTERS THE GRASS FILTER BED IN AN EVEN MANNER AS 'SHEET FLOW'.

5. TO ASSIST IN ACHIEVING AN EVEN SPREAD OF FLOW ACROSS THE GRASS, THE FLOW MAY BE DISCHARGED:

(i) VIA A SUITABLE OUTLET MANIFOLD (e.g. SLOTTED OR PERFORATED PIPE);

(ii) THROUGH A SEDIMENT FENCE CONSTRUCTED UP-SLOPE OF THE FILTER BED—THE SEDIMENT FENCE MUST BE CONSTRUCTED ALONG A LINE OF CONSTANT ELEVATION WITH A MAXIMUM SUPPORT POST SPACING OF 2m;

(iii) VIA A LEVEL SPREADER—MINOR FLOWS ONLY.

### MAINTENANCE

1. INSPECT THE GRASS FILTER BED REGULARLY AND AT LEAST DAILY DURING DE-WATERING OPERATIONS.

2. CHECK FOR EVIDENCE OF CONCENTRATED FLOW OR FLOW BYPASSING. MAKE REPAIRS AS NEEDED TO THE FLOW ENTRY/DISTRIBUTION SYSTEM TO RE-ESTABLISH SHEET FLOW CONDITIONS.

3. REMOVE EXCESSIVE ACCUMULATIONS OF SEDIMENT THAT MAY CAUSE THE CONCENTRATION OF FLOW.

4. EXCESSIVE SEDIMENT MAY BE DEFINED AS:

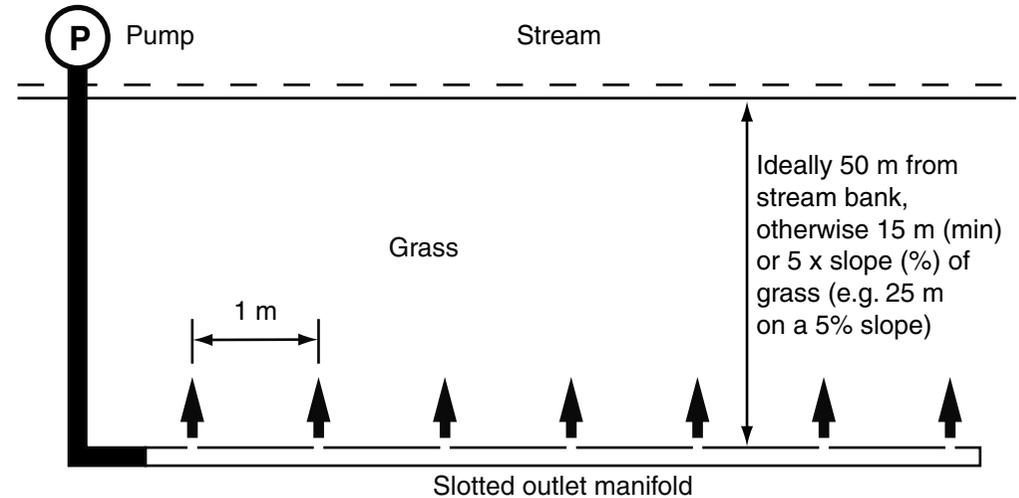
(i) ANY CLEARLY VISUAL SEDIMENT THAT COVERS A PORTION OF THE GRASSSED SURFACE; OR

(ii) SEDIMENT DEPOSITION SUCH THAT THE GRASS STRAND HEIGHT ABOVE THE SEDIMENT IS LESS THAN 50mm; OR

(iii) A DEPOSITION OF SEDIMENT IN EXCESS OF 750 GRAMS PER SQUARE METRE (APPROXIMATELY THE EQUIVALENT OF THREE 70mm DIAMETER BALLS OF DRY SOIL).

5. TAKE APPROPRIATE STEPS TO MAINTAIN AT LEAST 75% GRASS COVER OVER THE GRASS FILTER BED.

6. WHERE PRACTICAL, MAINTAIN THE GRASS AT A HEIGHT GREATER THAN THE EXPECTED DEPTH OF WATER FLOW, AND AT LEAST 50mm.



**Figure 1 -  
Ideal operation of grass filter bed adjacent a watercourse**

Drawn: GMW	Date: Mar-10	Grass Filter Beds	GFB-01
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