

This plan is to be read in conjunction with other engineering plans and any written instructions that may be issued.

The contractor shall implement all soil erosion and sediment control measures prior to disturbance of the related catchment area and to the satisfaction of the Superintendent.

The location of "silt" fences, barrier fences, sediment traps, basins and other devices are indicative only and final locations are to be decided on site. Variations will be permitted to best suit the circumstances.

Cleared vegetation must be disposed of by :-

- i) chipping or mulching for future landscaping and usage, or
- i) transport to an approved landfill facility.

Temporary crossbanks (bunds constructed with earth, straw bales or sandbags), shall be constructed during roadworks to limit slope length, where possible, to 80 metres. These shall be constructed immediately prior to forecast rain and during temporary closure of the site, including weekends.

Temporary rehabilitation should be undertaken on disturbed areas where works have stopped and soils are expected to remain exposed for two months.

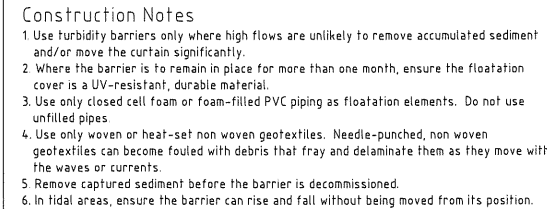
Sediment barriers (e.g. sandbags or straw bales) should be located upstream of stormwater inlets prior to the road surface being paved and upslope being rehabilitated.

At the conclusion of each day sand bags are to be placed at the end of completed sections of road pavement to prevent scouring.

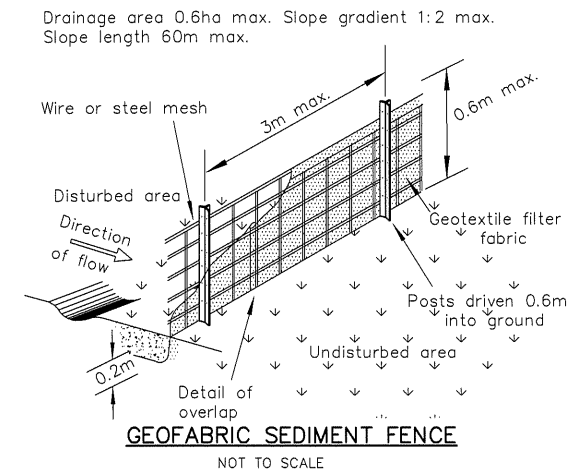
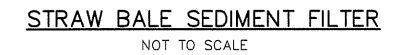
The contractor will inspect all erosion and pollution control works at least weekly and following every rainfall event greater than 5mm, providing particular attention to the following matters :

- Ensure drains operate effectively and initiate repair as required.
- Remove spilled sand (or other materials) from hazard areas, including lands closer than 5 metres from likely areas of concentrated or high velocity flows such as waterways and paved areas.
- Ensure rehabilitated lands have effectively reduced the erosion hazard and initiate upgrading or repair as appropriate.
- Construct additional erosion and/or sediment control works as might become necessary to ensure the desired protection is given to downslope lands and waterways, i.e., make ongoing changes to the plan.
- Maintain erosion and sediment control measures in a functioning condition until all earthwork activities are completed and the site is rehabilitated.
- Remove temporary soil conservation structures as a last activity in the rehabilitation program.
- Utilise a single access only to the stock pile sites.
- Do not taint clean catchment water with silt from the works.
- Drop inlets which do not outlet to silt traps shall be blocked until all works are completed.
- Rehabilitate the site as soon as possible after the completion of construction activities and within 10 working days.
- Lands where works are not to continue for more than 20 working days must be rehabilitated
- Such rehabilitation shall involve the spraying of a straw-bitumen mulch to the disturbed lands or equivalent.
- Access areas limited to a maximum width of 10 (preferably 5) metres.
- All positions shown are approximate and are best determined on site in conjunction with the superintendent.
- Conformity with this plan shall in no way reduce the responsibility of the Contractor to protect against water damage during the course of the contract.
- Topsoil and spoil shall be stockpiled in non-hazard areas and protected from surface run-off by diversion drains or similar.
- Stockpiles shall be surrounded on downstream sides by silt fencing. Stockpiles shall be suitably compacted to inhibit erosion.
- Where the stockpiling period exceeds four (4) weeks, the stockpile shall be seeded to encourage vegetation growth.

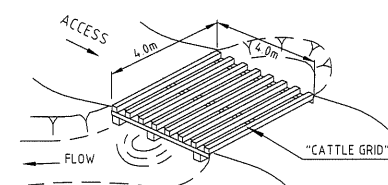
18. Topsoil shall be respread and stabilised as soon as possible. Disturbed areas shall be left with a scarified surface to encourage water infiltration and assist keying in topsoil.
19. The contractor shall provide a turf strip behind all kerb and gutter at completion of footpath formation.
20. The contractor shall maintain grass cover until all works have been completed including the maintenance period, by frequent watering and mowing where required.
21. All drainage works shall be constructed and stabilised as quickly as possible to minimise risk of erosion.
22. Vehicular traffic shall be controlled during construction confining access where possible to proposed or existing road alignments plus 3 metres. Areas to be left undisturbed shall be marked off.
23. Site access shall be restricted to a nominated point. The construction of a shake-down area will be required at the entry to the site.
24. Facilities and/or equipment must be provided for the application of water to disturbed areas to minimise the generation of airborne dust from any area disturbed by construction activities.
25. Material removed from sediment control structures must be disposed of in a way that does not pollute waters or bushland.
26. Waste disposal containers must be provided on site for the collection and disposal of all industrial and domestic type wastes generated on site.
27. Concrete wastes or washings from any concrete mixture or deliveries must not be deposited in any location where they can flow or be washed into waters.
28. Runoff from vehicle, construction plant or mobile plant maintenance and cleaning areas must be contained, collected and disposed of in a manner to prevent entry into any waters, including sediment retention ponds.
29. Fuelling of vehicles and construction plant must be carried out with an operator or driver present, and in a way that prevents any spillage occurring.



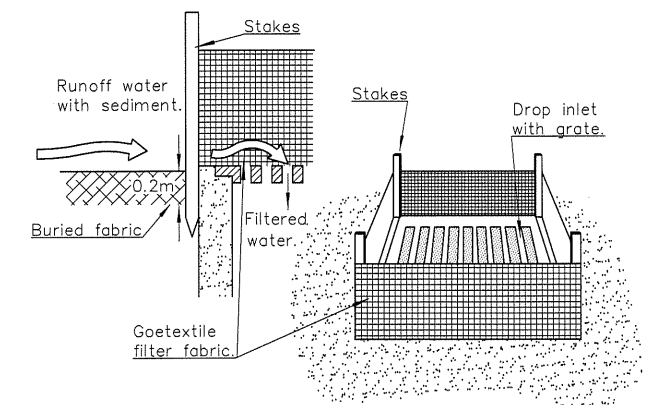
**TURBIDITY BARRIER** **SD 6-10**



1. Sediment detention basins are to be drained within 5 days from the conclusion of a storm event. The discharge waters from the sediment basins should have a suspended solid content of less than 50 milligrams per litre. Where higher suspended solids concentration occur treat the water chemically with gypsum before release to flocculate and settle the particles.
2. Basins should be treated with gypsum at the rate of 32 kilograms per 100 cubic metres of water whenever capacity is reduced by more than 20 percent by water and sediment, and drainage commenced 36 to 48 hours later.
3. Basins should have sediment removed when 10 percent of capacity is lost to pollution. Any waste material should be disposed in sediment dumps where further pollution to downslope lands and waterways is unlikely.



TEMPORARY CONSTRUCTION EXIT  
SHAKE-DOWN FACILITY DETAIL (CATTLE GRID)



GEOTEXTILE FILTER FABRIC  
SEDIMENT TRAP

## SOIL & WATER MANAGEMENT NOTES

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