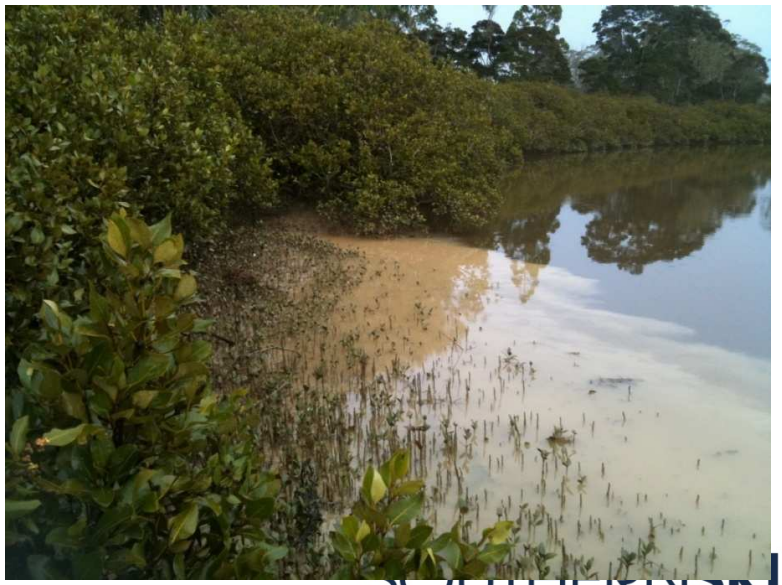
ESC Plans

- An erosion and sediment control plan needs to provide detail of the Erosion and Sediment Control measures for each phase of a project to avoid uncontrolled sediment discharges and minimise cost.



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Common Mistakes

- Lack of supporting information
- Inadequate Planning
- Land disturbance not staged
- Inadequate staging of ESC measures
- Inadequate monitoring and maintenance programmes

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What is a Treatment Train?

- a series of Best Management Practices and/or natural features, each planned to treat a different aspect of potential pollution, that are implemented in a linear fashion to maximize pollutant removal.

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What makes a good plan?

- **methodology**
  - identified hot spots
  - minimise measures (staging works, think how and when to do them)
  - plans that account for the worst case scenario
  - simple but remember site is dynamic/ co-ordinate activities
- **runoff control – isolate the site**
- **think about control measures**
  - where and what to build
  - do they relate to the site and receiving environment needs
  - use the right control measures and know their limitations
  - install erosion and sediment controls before other earthworks
  - attention to detail/ links the site

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Best Practice ESC Plans

- ESC Plans for each stage of development
  - Does the plan allow the controls to remain until the final stages of development? – Remember earthworks sites are dynamic
  - Does the plan account for drainage and other infrastructures works?

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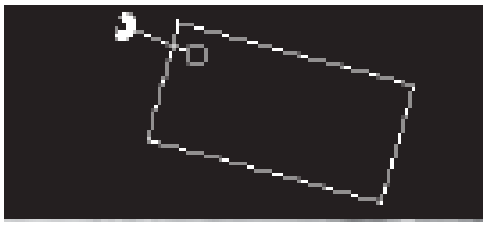
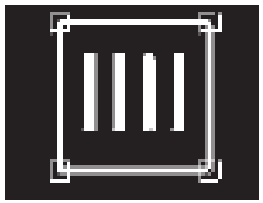
Best Practice ESC Plans

- Standard symbols used for devices (refer local guideline)





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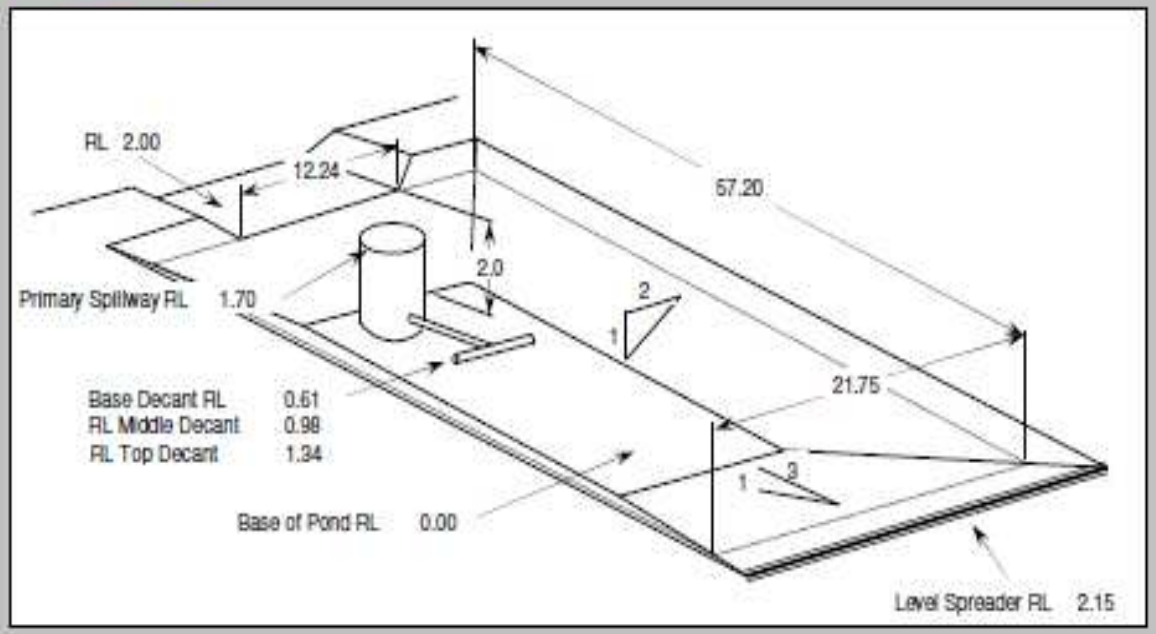
Best Practice ESC Plans

- Devices sized and plans provided where appropriate

Sediment Retension Pond Sizing

Size criteria	Length Ratio	Side slopes	Depth from Emergency Spillway	R.L. of Pond Base
3%	3:1	2:1	2.00	0.00

Storage Volume Criteria	3%
Contributing Catchment (ha)	5.00
Minimum Storage Volume (m3)	1500
Length at Spillway Level	57.20
Width at Spillway Level	21.75
Spillway base width (300mm deep)	12.24
Primary Spillway diameter (min)	Manhole Required
Number of decants	3
Number of holes per decant	222
Minimum outlet diameter	300mm
RL Emergency Spillway	2.00
RL Primary Spillway	1.70
RL Level Spreader (min)	2.15
RL Base Decant	0.61
RL Middle Decant	0.98
RL Top Decant	1.34



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Best Practice ESC Plans

- All Erosion and Sediment Control devices should be numbered for example SF – 1, SRP – 1
- An installation/ construction sequence should also be provided

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Best Practice ESC Plans

ESC Item	Dwg	Installed	Removed	Ref	Comments
CWD – 1	SC01-2007-003	Prior to disturbance	After site stabilised	ARC TP90 1.1 and attached specific sizing	Purpose of this drain is to divert upper catchment cleanwater away from the site
SF - 1	SC01-2007-003	Prior to disturbance	After site stabilised (80% cover)	ARC TP90 2.2	
Entrance - 1	SC01-2007-003	Day 1	When permanent roads are stabilised	ARC TP90 1.8	

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Best Practice ESC Plans

- Monitoring and maintenance programmes/ checklists
- Programme – Installation/ stabilisation / decommissioning
- Site responsibilities
- Review
- Certification of controls

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