



BlueScope Port Kembla Advanced Steel Manufacturing Precinct (ASMAP)

Progressive Erosion and Sediment Control Plans (PESCP) – Stage 3 Works – Version 1

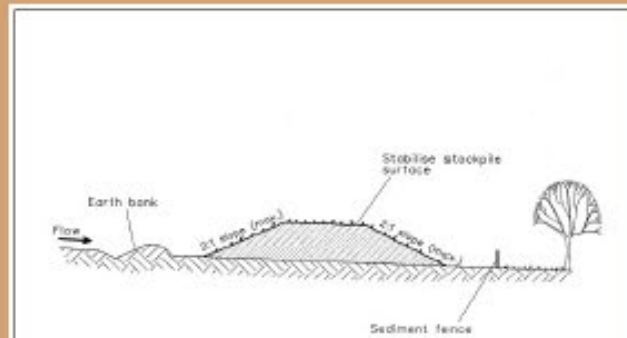
NOTES

1. This progressive plan is to be read in conjunction with the Construction Environmental Management Plan (CEMP) and relevant specifications and procedures.
2. Works programming to maximise the mitigation of erosion by the early implementation of permanent drainage measures and minimising the area and duration of soil disturbance.
3. Weather forecasting to be monitored and site management measures to be planned for imminent storm/rain/wind events.
4. The plan is to be revised as necessary (i.e. progression of works, altered site conditions or weather).
5. All erosion and sediment controls generally to be constructed in accordance with Managing Urban Storm Water: Soils and Construction – 4th Edition, Landcom, 2004.
6. The controls depicted in the following plans are indicative only. The exact position and construction of the nominated controls will be determined, subject to site conditions and constraints. Any significant changes in the nature or function of controls will be progressively marked on this series of PESCP's.
7. Toolbox talks/daily briefings to regularly focus on erosion and sediment control for specific works, associated risks, potential impacts and mitigation measures.
8. Temporary controls in addition to those shown may be required at strategic locations as required by the progression of works or weather conditions.
9. Maximise the interception and diversion of upslope 'clean' (off site / storm water) away from works areas. The 'clean' flows to be conveyed in controlled drainage lines to suitable discharge points. The flows to be discharged to off-site areas at non-erosive velocities with adequate diffusers.
10. Ensure drainage paths and controls are adjusted as required to maximise the separation of 'clean' (off site) and 'dirty' (on site) water flows through/off site.
11. Temporary stockpiles to be located in approved areas and away from drains and flow lines.
12. All erosion and sediment control devices shall be properly maintained for the duration of the work. All structures are to be inspected after rain events and sediment to be removed when the capacity has been reduced by 30% or more.
13. Install sediment fencing or similar surround three sides of temporary stockpile. Any temporary stockpiles should be stabilised when not in use.
14. Any waste proposed for off-site disposal should be assessed in accordance with the NSW EPA Waste Classification Guidelines (2014).
15. Any encountered Acid Sulfate Soils to be managed in accordance with the Project's ASSMP.
16. Unusual odours (particularly sulfidic in nature) or water discolouration, during monitoring, excavation and dewatering should be reported to site management as soon as possible and management measures reviewed.
17. Do not discharge water or wastewater to stormwater, watercourses, drainage channels or into surrounding land without approval.
18. Cover, or otherwise protect from erosion, stockpiles that will be in place for more than 14 days.
19. Protect existing and constructed inlets to pits and culverts from sediment ingress.
20. Undertake visual dust monitoring during site works, and provide measures where required including dust suppression.
21. Regularly inspect erosion and sediment control measures, including following rainfall events and repair as necessary.
22. Enter and exit the site via approved stabilised access points and monitor public roads for sediment tracking.
23. All site personnel to report any spills or leaks as soon as possible.
24. Standard drawings of erosion and sediment control devices for reference provided at end of PESCP.
25. A standard schematic of a Potential Acid Sulfate Soil (PASS) staging area is provided for reference with the Acid Sulfate Soil Management Plan (ASSMP).
26. Untreated PASS soils should be maintained separately from treated PASS soils within the designated storage area.
27. Water collected from the leachate drains that are to be installed around the PASS staging area is to be collected and discharged as per the Dewatering Management Plan.
28. PASS should not be stored with non-PASS soils. Maintain separate stockpiles for PASS or non-PASS materials. Clearly delineate and include signage of PASS stockpiles to prevent cross-contamination of materials.
29. The storage of any wastewater will be within a suitable self-bunded container (e.g. intermediate bulk container) and discharged into the existing site water treatment system.

VERSION	DESCRIPTION	DRAWN BY	DATE
01	ORIGINAL ISSUE – STAGE 3	MEG COLES	18/12/2024



Erosion and Sediment Control

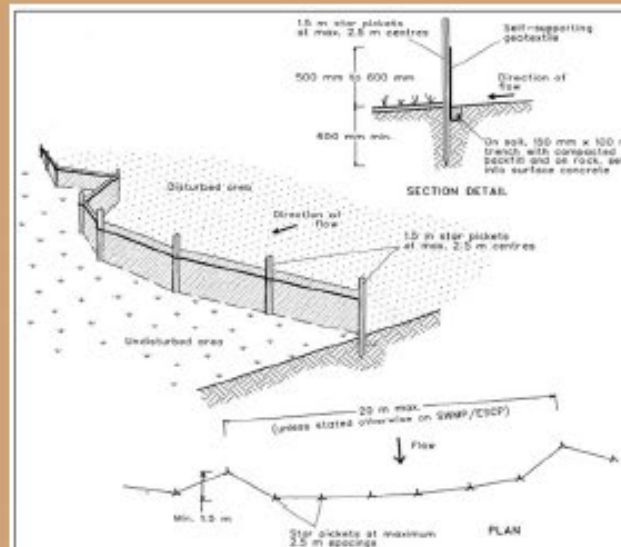


Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP/CSCP.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES

SD 4-1

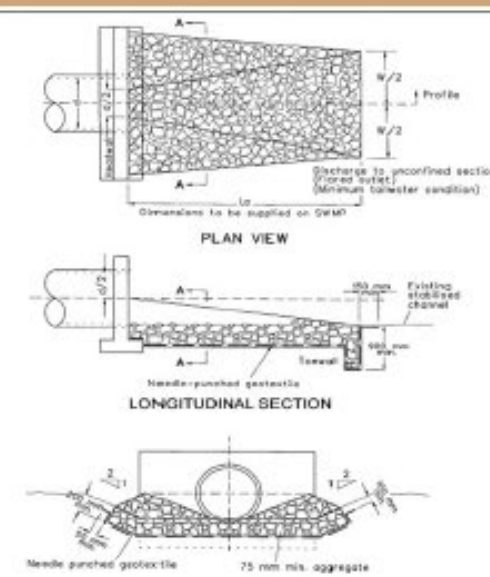


Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metres long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the bench. Ensure any star pickets are filled with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

SEDIMENT FENCE

SD 6-8

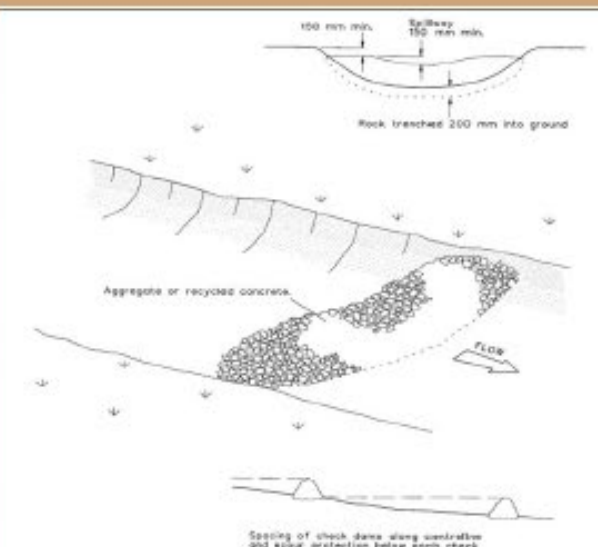


Construction Notes

1. Compact the subgrade fill to the density of the surrounding undisturbed material.
2. Prepare a smooth, even foundation for the structure that will ensure that the needle-punched geotextile does not sustain serious damage when covered with rock.
3. Should any minor damage to the geotextile occur, repair it before spreading any aggregate. For repairs, patch one piece of fabric over the damage, making sure that all joints and patches overlap more than 300 mm.
4. Lay rock following the drawing, according to Table 5.2 of Landcare (2004) and with a minimum diameter of 75 mm.
5. Ensure that any concrete or parapet used for the energy dissipater or the outlet protection conforms to the grading limits specified on the SWMP.

ENERGY DISSIPATER

SD 5-8

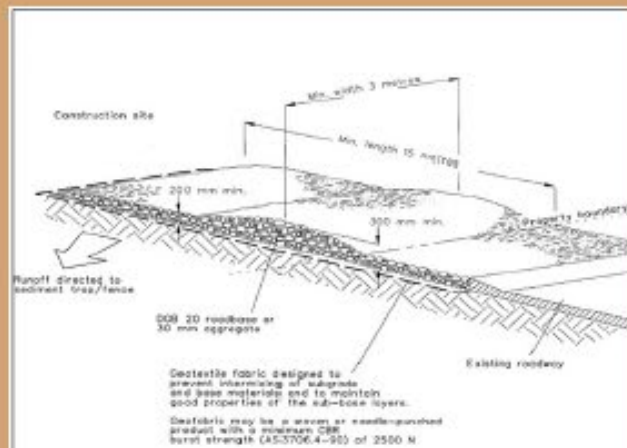


Construction Notes

1. Check dams can be built with various materials, including rocks, logs, sandbags and straw bales. The maintenance program should ensure their integrity is retained, especially where constructed with straw bales. In the case of bales, this might require their replacement each two to four months.
2. Trench the check dam 200 mm into the ground across its whole width. Where rock is used, fill the trenches to at least 150 mm above the ground surface to reduce the risk of undercutting.
3. Normally, their maximum height should not exceed 600 mm above the gully floor. The centre should act as a spillway, being at least 150 mm lower than the outer edges.
4. Space the dams so the toe of the upstream dam is level with the spillway of the next downstream dam.

ROCK CHECK DAM

SD 5-4

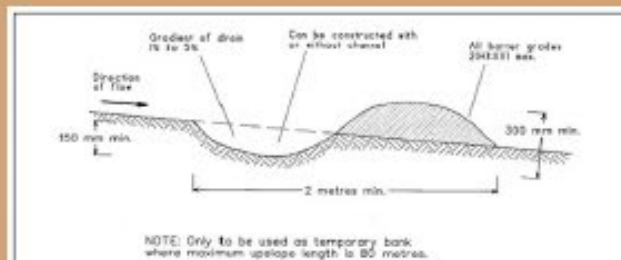


Construction Notes

1. Strip the topsoil, level the site and compact the subgrade.
2. Cover the area with needle-punched geotextile.
3. Construct a 250-mm thick pad over the geotextile using road base or 30-mm aggregate.
4. Ensure the structure is at least 15 metres long or to building alignment and at least 3 metres wide.
5. Where a sediment fence joins onto the stabilised access, construct a hump in the stabilised access to divert water to the sediment fence.

STABILISED SITE ACCESS

SD 6-14

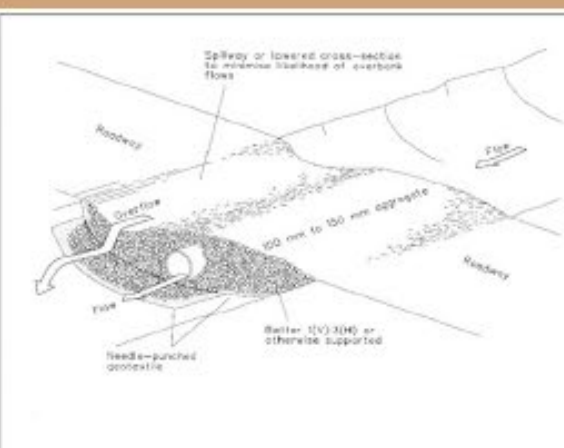


Construction Notes

1. Build with gradients between 1 percent and 5 percent.
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities that could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V shaped.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction.

EARTH BANK (LOW FLOW)

SD 5-5

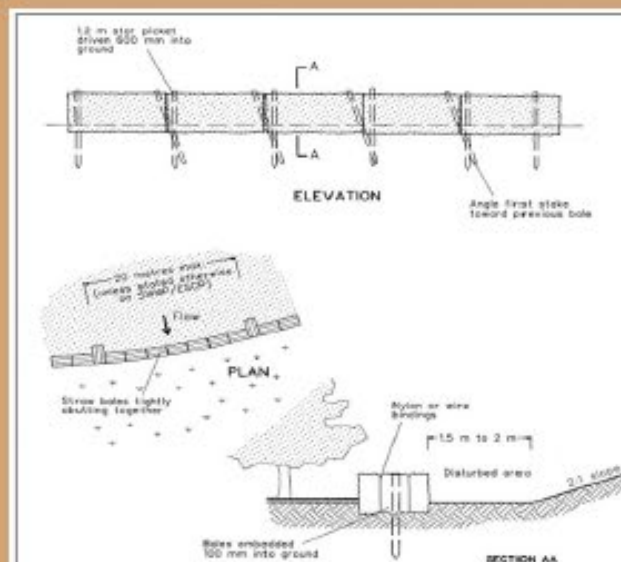


Construction Notes

1. Prohibit all traffic until the access way is constructed.
2. Strip any topsoil and place a needle-punched geotextile over the base of the crossing.
3. Place clean, rigid, non-polluting aggregate or gravel in the 100 mm to 150 mm size class over the fabric to a minimum depth of 200 mm.
4. Provide a 3-metre wide carriageway with sufficient length of culvert pipe to allow less than a 3(H):1(V) slope on side batters.
5. Install a lower section to act as an emergency spillway in greater than design storm events.
6. Ensure that culvert outlets extend beyond the toe of fill embankments.

TEMPORARY WATERWAY CROSSING

SD 5-1



Construction Notes

1. Construct the straw bale filter as close as possible to being parallel to the contours of the site.
2. Place bales lengthwise in a row with ends tightly abutting. Use straw to fill any gaps between bales. Straws are to be placed parallel to flow.
3. Ensure that the maximum height of the filter is one bale.
4. Embed each bale in the ground 75 mm to 100 mm and anchor with two 1.2 metre star pickets or stakes. Angle the first star picket or stake in each bale towards the previously laid bale. Drive them 600 mm into the ground and, if possible, flush with the top of the bales. Where star pickets are used and they protrude above the bales, ensure they are filled with safety caps.
5. Where a straw bale filter is constructed downslope from a disturbed batter, ensure that bales are placed 1 to 2 metres downslope from the toe.
6. Establish a maintenance program that ensures the integrity of the bales is retained - they could require replacement each two to four months.

STRAW BALE FILTER

SD 6-7