INITIAL EROSION AND SEDIMENT CONTROL MANAGEMENT PLAN

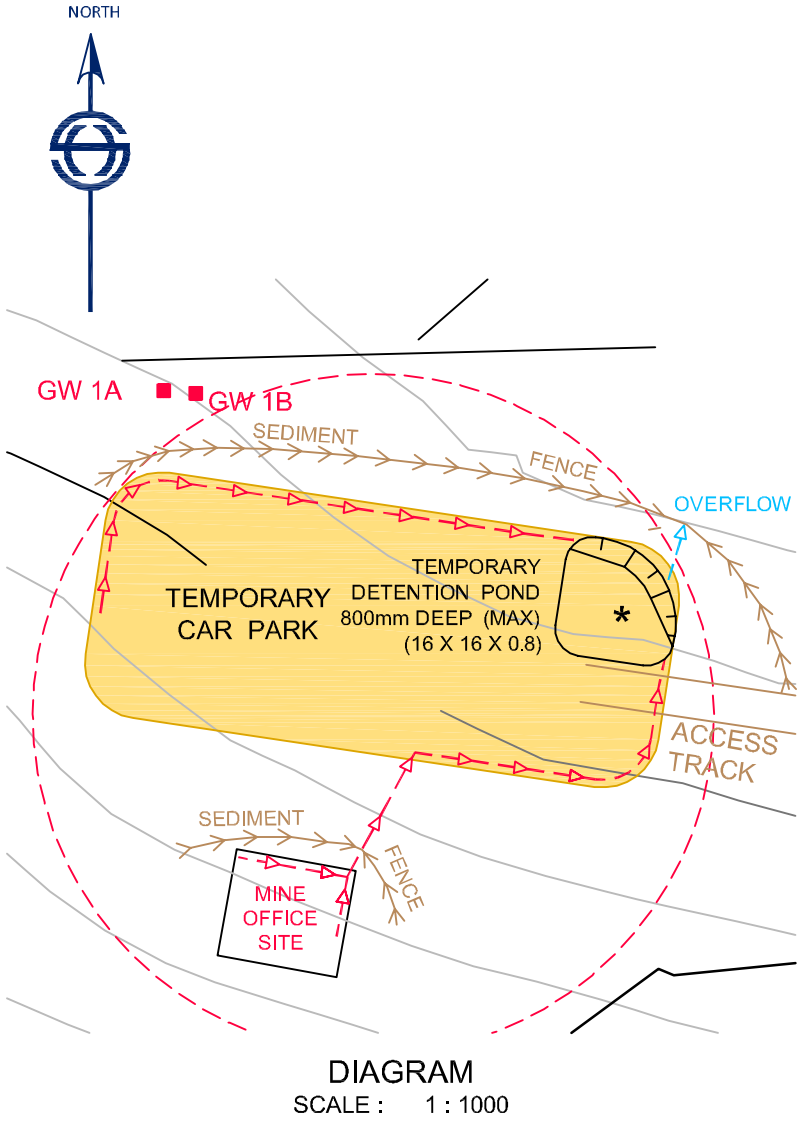
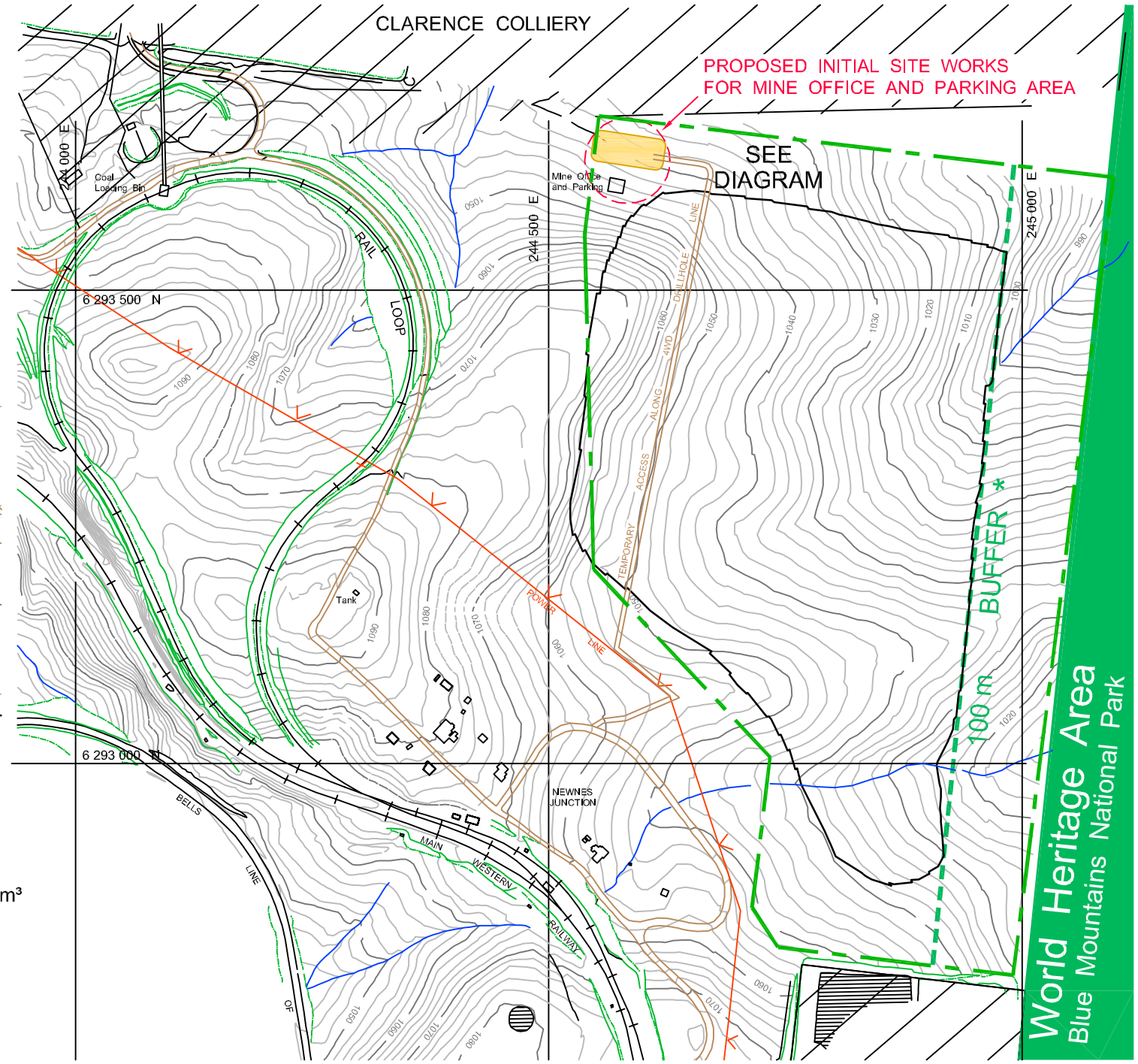


DIAGRAM
SCALE : 1 : 1000

■ GW 1B - GROUND WATER MONITORING BORES

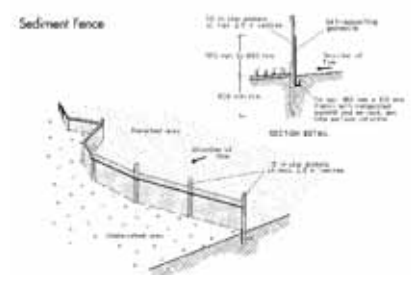
* MINIMUM CAPACITY 190m³ BASED ON BLUE BOOK CRITERIA.

0 100 200 300
SCALE 1 : 6000 (A3)

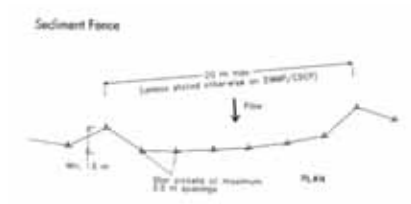


LEGEND

- Dirty Water
- Clean Water Diversion
- Topsoil Stockpile
- Clean Water Pipeline
- Pumped Pond Water



1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown, to limit the catchment area of any one section.
2. Cut a 150mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5mm long star pickets into ground at 2.5m intervals (max) at the downslope edge of the trench. Fit star pickets 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 with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing.
5. Join sections of fabric to a support post with 150mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.



Practices:

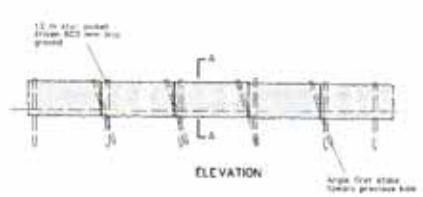
The following practices should be adopted to manage the potential for erosion and sedimentation on site:

- Sediment basin to be constructed prior to commencement of demolition works, to be located at the lowest point on the site to trap runoff and allow settling prior to discharge from site. The basin will need to be maintained after each runoff event.
- Diversion of clean runoff to stable, grassed areas prior to entry to disturbed areas.
- Sediment fence to be located below all disturbed areas and stockpile sites prior to disturbance.
- Storm water drains (grassed swales) are to be graded so as to ensure that no ponding of water will occur.
- Where possible, diversion banks should be 'pushed up' from behind to minimise potential erosion of the borrow area.
- The site Supervisor shall exercise discretion as to the appropriate location of erosion and sediment control measures given the stage of operations and the nature of soils disturbance.

Notes

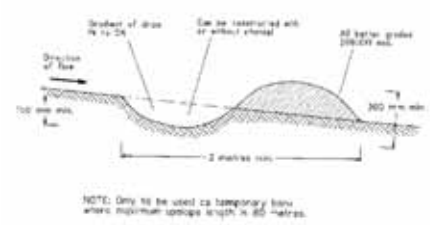
1. All work is to be carried out in accordance with relevant ordinances and regulations; note in particular the requirements of landcoms 'managing Urban Stormwater, Soils and Construction' (The Blue Book).
2. Establish all required stakes hay bales as detailed on the adjacent site plan and in accordance with detail SD6-7 of the 'Blue Book'.
3. All swales and infiltration/evaporation storage basin, plus hay bales to be constructed prior to pad construction.

Straw Bale Filter



1. Construct the straw bale perpendicular to sediment fence but with small returns as shown in the drawing to limit the catchment area of any one section.
2. Place two bales lengthwise in a row with ends tightly abutting. Use straw to fill any gaps between bales. The straws in each bale are to be aligned parallel to the ground.
3. Ensure that the maximum height of the filter is one bale.
4. Embed each bale in the ground 75mm to 100mm and anchor with two 1.2m star pickets or stokes. Angle the first star picket or stake in each bale towards the previously laid bale. Drive them 600mm 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 fitted with safety caps.
5. Where a straw bale filter is constructed downslope from a disturbed batter, ensure the 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.

Earth Bank (Low Flow)



1. Build with gradient between 1% and 5 %
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.

Principles:

The following principals have been adopted in preparing this Erosion and Sediment Control Plan, and shall be implemented as part of development:

- Investigate the site features.
- Prepare an Erosion and Sediment Control Plan.
- Expose the smallest possible area of land for the shortest possible time.
- Save topsoil for reuse.
- Control runoff onto, through and from the site.
- Use erosion control measures to prevent on-site damage.
- Use sediment control measures to prevent off-site damage.
- Rehabilitate disturbed areas quickly.
- Maintain erosion and sediment control measures.

TITLE: INITIAL EROSION AND SEDIMENT CONTROL MANAGEMENT PLAN

LOCATION: NEWNES

DATUM:
PROJECTION: MGA

DATE: JANUARY 2010
PURPOSE: PLANNING

AUTOCAD REF: 105716 - 14B
VERSION (PLAN BY): INITIAL EROSION & SEDIMENT

CLIENT: NEWNES SAND & KAOLIN
JOB REF: 105716

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