89 George Street, Parramatta Sediment and Erosion Control SYD0923800

Date: 12 January 2010

Client

Woods Bagot

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Authorised for Issue

Project Leader

Date

WSPLincolneScott

climate friendly business

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1 Sediment and Erosion Control

The contractor for the excavation and construction works is required to provide Erosion and Sedimentation control in accordance with following general requirements described as follows

All existing surface drainage pits shall be protected as detailed below including all boundaries where there is potential run off to contaminate any downstream or surrounding property of the proposed development boundary (private or public) shall be protected use of erosion fencing and earth berms. All public highways and pavements shall be kept clean at all times from construction traffic to and from the site.

2 Site Protection Management

It is proposed the following is provided to inhibit the movement of sediment of the site during the demolition and construction phases.

3 Site Access

- Construction vehicles leaving the site shall be require to pass over a temporary construction vehicle entry cattle rack comprising of a 15metre long by 3 metre wide heavy duty trafficable unit.

4 Sediment Control

All exposed earth or site surfaces where it would be possible for runoff to convey silt down slope shall be protected with sediment and erosion control silt fence typically installed along the boundaries of the proposed site perimeter.

The fence will be constructed in accordance with details provided by the department of conservation and land management incorporating geotextile fabric which will not allow suspended particles greater than 50mg / litre non filterable solids to pass through, and to comply with the appropriate provisions of the Clean Waters Act 1970.

The construction of the of the silt fence will include the following

- Geotextile fabric shall be buried into the ground at a maximum depth of 100mm below the surface.
- Overlapping any joins in the geotextile fabric preventing migration of any silt pass the joints.
- Internal site drainage pits shall be protected by sediment traps consisting of hay bales.
- Any council owned road kerb entry including gully pits will be protected by Atlantis filter bales and Ecosock or equal proprietary system, further protection will be provided by inserting water clean filter cartridges into the gully opening.
- Turning up the ends for a length of 1 metre in order to prevent volumes of suspended solids escaping in a storm event.

5 Temporary stormwater dewatering pump out system

Site surface water runoff within the zones of the excavation will be drained into a central holding well within the excavation. Runoff will be allowed to settle out suspended particles and debris and an acceptable water quality of 50mg / litre of Non Filterable Residues NFR is required to be achieved prior to discharge by dewatering into the Authority public drainage system.

From the stormwater having adequate pre- treatment and water quality has been verified on site, it can be allowed to be pumped into the Authority stormwater system at a maximum rate of 2 - 4 litres / second.

The proposed dewatering pumps shall be one duty and one standby submersible pumps clear of the bottom mounted on a 300mm high concrete plinth.

The proposed stormwater rising mains to each of the excavation areas will be in the order of 65mm outside diameter polyethylene, PE80B Blueline, Class 12.5. or equal pipe grade and rating.

6 Dust Control

To control the dust generated on site the following procedures shall be followed.

- Loose loads entering or leaving the site will be securely covered by a tarpaulin or similar material in accordance with RTA and Authority guidelines.
- Soil transport vehicles will use the dedicated site entry with cattle grid.
- There will be burning of any materials on site.
- Water sprays will be used across the site to help prevent dust becoming airbourne. Water will be applied by water sprinklers or water carts across ground surfaces where the surfaces has dried out. The water truck shall be equipped with pump and spray.
- The water shall be sprayed at a rate no less than 3 litre / second at a minimum pressure of 700kPa to maintain the ground with a dampened layer that prevents the dust becoming air Bourne without causing runoff. The water truck shall remain on site during the construction of the ground works.
- During excavation all trucks / machinery leaving the site will have their washed prior to travelling on the roads
- Fences will have shade cloth or similar fabric fixed to the inside of the fence.

7 Maintenance

The site management or building contractor shall take responsibility for carrying out the works to ensure sediment and erosion control devices on site are maintained. The devices shall be checked daily and the appropriate maintenance undertaken as necessary.

Prior to the closing of the site each day, the road to be swept and any material removed or taken back onto site. No water shall be used for cleaning and rinsing the road from material deposited from the site.

Gutters and roadways will be kept clean regularly to maintain them free of sediment

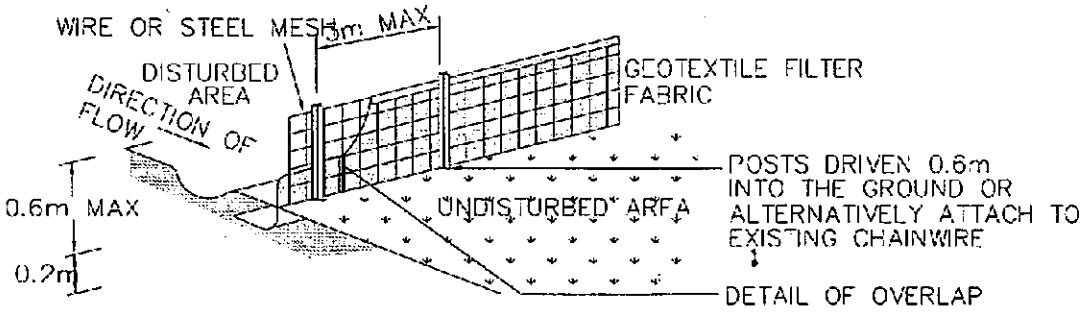
Appropriate covering techniques will be used to cover excavation faces, stockpiles and any unsealed surfaces in particular where dust is generated from a given surface, and water sprays not effective.

The area of soils exposed at any one time will be minimised wherever possible by excavating in a localised progressive manner over the site.

It is considered that by complying with the above, appropriate levels of protection are afforded to the site and the adjacent public roads, footpaths and environment.

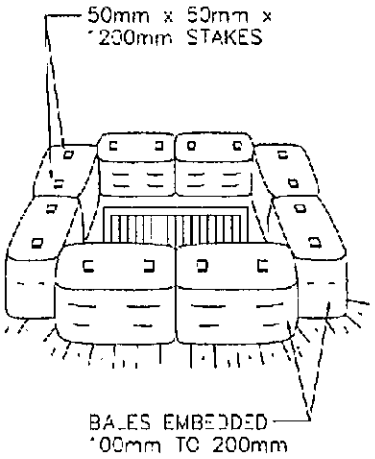
APPENDIX A – SEDIMENT CONTROL DETAILS

PROVISION OF SITE STORMWATER DRAINAGE



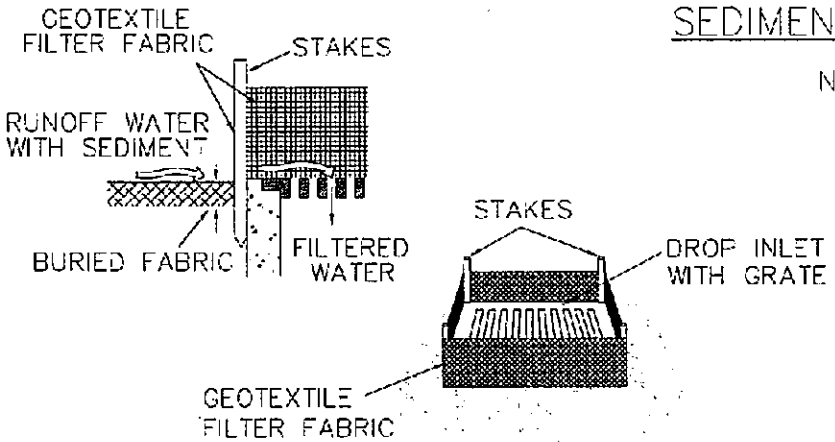
SEDIMENT CONTROL FENCE

NTS



STORMWATER PIT SEDIMENT TRAP

NTS



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP

NTS

APPENDIX B – SEDIMENT CONTROL PLAN

A4

GEORGE

LANE

CHARLES ST

SITE ENTRANCE. CATTLE GRID

SEDIMENT FENCE.

PROTECT THE EXISTING STORMWATER DRAINAGE SYSTEM & INLETS AS REQUIRED WITH LOW FILTER BALES MANUFACTURED BY ATLANTIS OR EQUAL PROPRIETARY SYSTEM.

PORTABLE FILTER USED AS REQUIRED

FILTER FENCE AROUND COLLECTION PIT WITH SUBMERSIBLE PUMP FOR DEWATERING.

SEDIMENT FENCE AROUND PERIMETER OF SITE.

SEDIMENT CONTROL

300 D/CL

225 VC

150 VC

225 PVC
Conc Encased

100 C/CL

Disused

VSE

126-130

12

150

1
79
81
83
CP
85
89
91
C
93
101
95-101
102
3
65
64
63A
63
62
114-116
23
413
414
3-4

DBYD Address:
89 George Street
Parramatta NSW 2150

DBYD Job No: 172609

DBYD Sequence No: 16905598

SYDNEY WATER CORPORATION

Scale: 1:1000

Date of Production: 13/10/2009

Plan 1 of 1

N

0m 5m 10m 15m 20m