

# SEDIMENT AND EROSION CONTROL

- 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 STANDARDS OF 'MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION' & PITTWATER COUNCIL SPECIFICATIONS.
- ALL SUBCONTRACTORS SHALL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWN SLOPE AREAS.
- LAND DISTURBANCE SHALL BE LIMITED TO THAT NECESSARY FOR IMPLEMENTATION OF THE PLANS OF WORKS. BUFFER ZONES AND LANDS NOT TO BE DISTURBED SHALL BE CLEARLY MARKED WITH BARRIER FENCES. 'SILT' FENCES OR STRAW BALE SEDIMENT TRAPS SHALL BE PLACED AT REGULAR INTERVALS IMMEDIATELY DOWNSLOPE OF ALL UNPROTECTED DISTURBED LANDS.
- THE LOCATION OF 'SILT' FENCES, BARRIER FENCES, SEDIMENT TRAPS AND OTHER DEVICES ARE INDICATIVE ONLY AND FINAL LOCATIONS ARE TO BE DECIDED ON SITE. VARIATIONS WILL BE PERMITTED TO BEST SUIT THE CIRCUMSTANCES. CONTRACTOR TO PREPARE DETAILED CONSTRUCTION SEDIMENT AND EROSION CONTROL PLAN FOR APPROVAL BY THE SUPERINTENDENT.
- ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED BY THE CONTRACTOR FOLLOWING EACH STORM EVENT AND ANY NECESSARY MAINTENANCE WORK SHALL BE UNDERTAKEN TO ENSURE THEIR CONTINUED PROPER OPERATION. SEDIMENT SHALL BE REMOVED FROM THE THE SOIL EROSION & SEDIMENT CONTROL STRUCTURES WHEN NO MORE THAN 40% CAPACITY HAS BEEN REACHED. THESE STRUCTURES SHALL CONTINUE IN PROPER OPERATION UNTIL ALL DEVELOPMENT ACTIVITIES HAVE BEEN COMPLETED AND THE SITE FULLY STABILISED.
- TEMPORARY REHABILITATION SHALL BE UNDERTAKEN WITHIN 14 WORKING DAYS ON DISTURBED AREAS WHERE WORKS HAVE STOPPED AND SOILS ARE EXPECTED TO REMAIN EXPOSED FOR MORE THAN 14 DAYS BEFORE EITHER WORKS CONTINUE OR PERMANENT REHABILITATION IS UNDERTAKEN.
- AT LEAST WEEKLY, THE CONTRACTOR WILL INSPECT THE SITE, 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.
  - REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS
  - 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
- THE CONTRACTOR WILL KEEP A LOG BOOK, MAKING ENTRIES AT LEAST WEEKLY AND IMMEDIATELY PRIOR TO FORECAST RAINFALL AND/OR SITE CLOSURE. RECORD:
  - THE VOLUME OF ANY RAINFALL EVENTS;
  - THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS;
  - APPLICATIONS OF FLOCCULATING AGENTS TO SEDIMENT RETENTION SYSTEMS;
  - VOLUMES OF WATER DISCHARGED FROM SEDIMENT RETENTION SYSTEMS; AND
  - REMEDIAL WORKS.

THE BOOK WILL BE KEPT ON-SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS. COPIES OF MONTHLY ENTRIES ARE TO BE PROVIDED WITH PROGRESS CLAIMS.
- DO NOT TAINT CLEAN CATCHMENT WATER WITH SILT FROM THE WORKS.
- 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. DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS TO THE SATISFACTION OF THE SUPERINTENDENT AND COUNCIL.
- MATERIAL REMOVED FROM SEDIMENT CONTROL STRUCTURES MUST BE DISPOSED OF IN A WAY THAT DOES NOT POLLUTE WATERS OR BUSHLAND AND DISPOSED OF TO AN APPROVED DUMP SITE.
- RUNOFF FROM VEHICLE OR CONSTRUCTION PLANT MAINTENANCE AND CLEANING AREAS SHALL BE COLLECTED AND DISPOSED OF IN A MANNER THAT DOES NOT POLLUTE.
- 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.

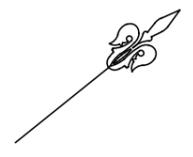
- ALL POSITIONS SHOWN ARE APPROXIMATE AND ARE BEST DETERMINED ON SITE IN CONJUNCTION WITH THE SUPERINTENDENT.
- DUST SCREENS ARE TO BE ERRECTED AROUND THE PERIMETER OF THE WORK SITE DURING LAND CLEARING, EXCAVATIONS & CONSTRUCTIONS AS DIRECTED BY THE SITE SUPERVISOR.

## SEDIMENT FENCE

- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BE 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/sec IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- DRIVE 1.5 METER LONG STAR PICKETS INTO GROUND AT 2.5 METER INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE TRENCH, 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.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

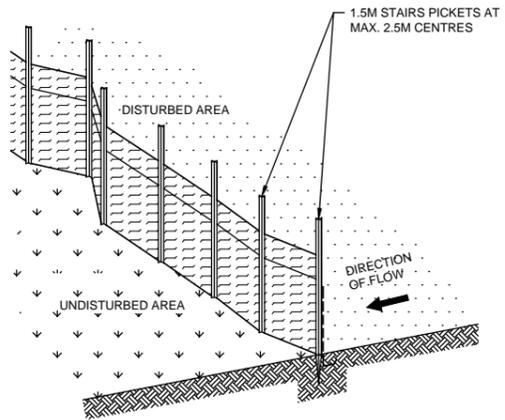
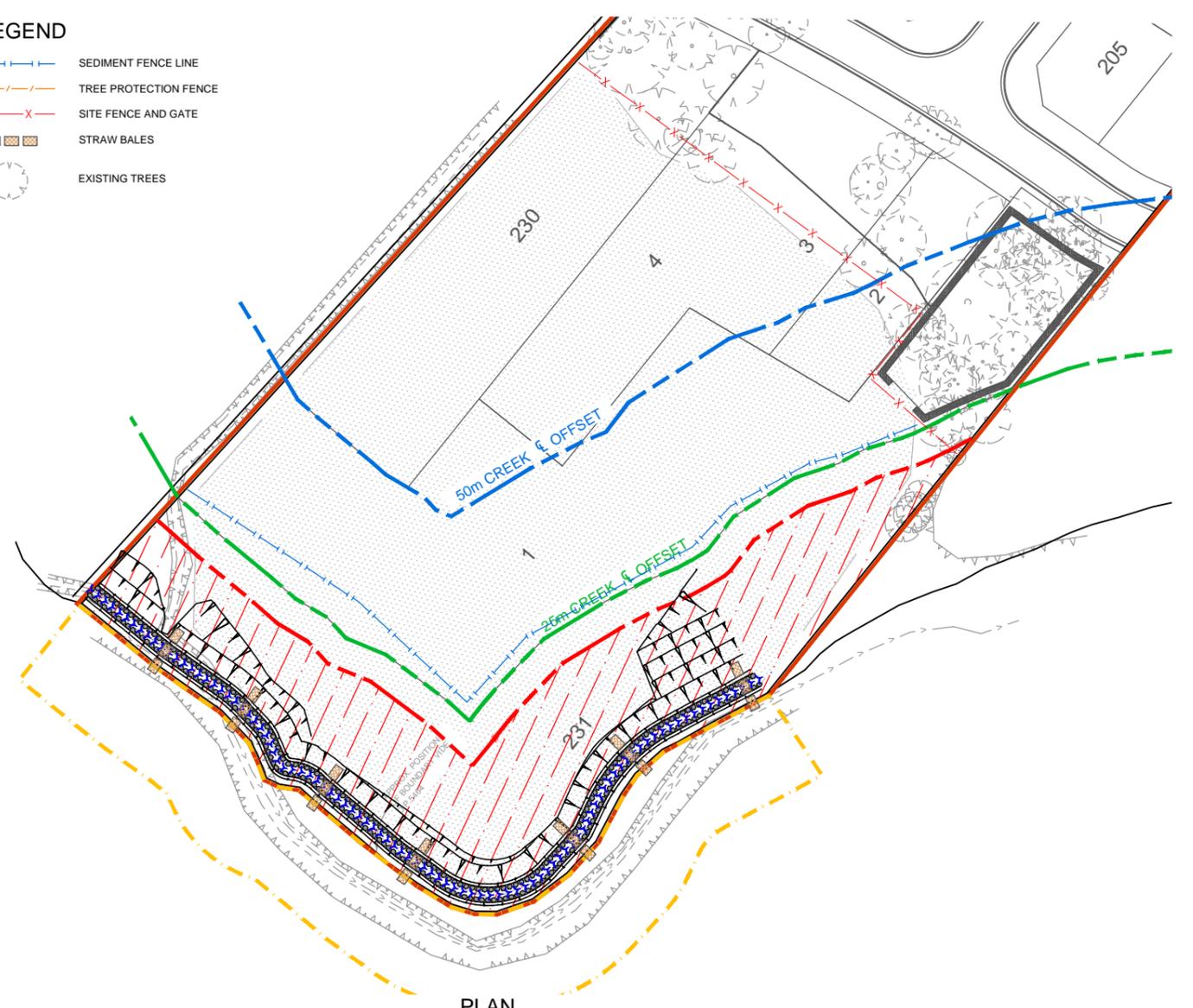
## STRAW BALE FILTERS

- CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DIAGRAM TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION.
- PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN THE BALES. THE STRAWS IN EACH BALE ARE TO BE ALIGNED PARALLEL TO THE GROUND.
- ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
- EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH 1.2m STAR PICKETS OR STAKES. 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.
- WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE BALES ARE PLACED 1m TO 2m DOWNSLOPE FROM THE TOE.
- ESTABLISH A MAINTENANCE PROGRAM THE ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

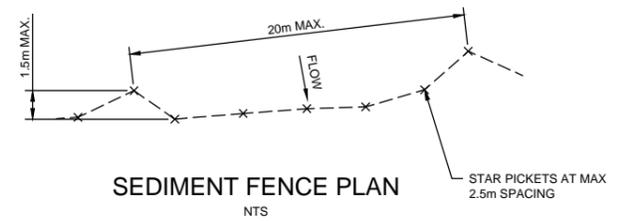


## LEGEND

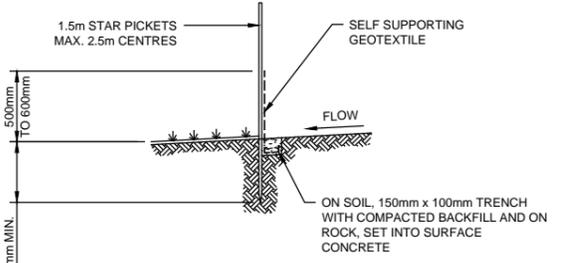
- SEDIMENT FENCE LINE
- TREE PROTECTION FENCE
- SITE FENCE AND GATE
- STRAW BALES
- EXISTING TREES



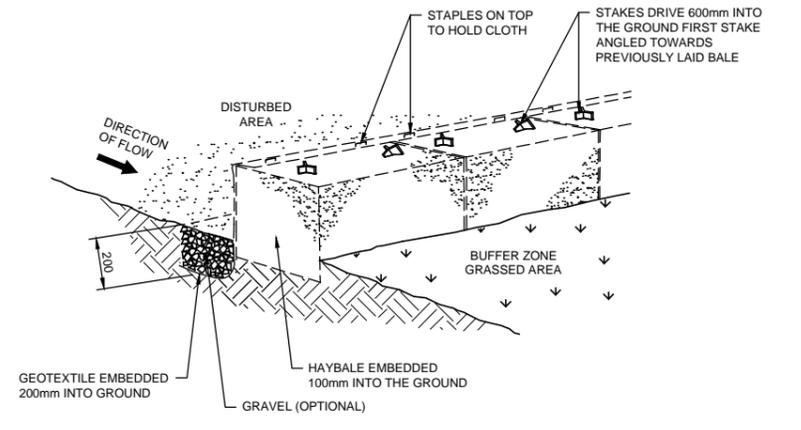
SEDIMENT FENCE DETAIL  
NTS



SEDIMENT FENCE PLAN  
NTS



SEDIMENT FENCE SECTION  
NTS



STRAW BALE AND GEOTEXTILE SEDIMENT FENCE  
NTS

REV	DATE	ISSUED FOR DEVELOPMENT APPLICATION	AMENDMENT DESCRIPTION
A	20.10.16	ISSUED FOR DEVELOPMENT APPLICATION	



Project: **PROPOSED SUBDIVISION OF LOT 32 SECTION C D.P.5464 NARRABEEN CREEK REHABILITATION**

Principal:	WOOLWICH PTY. LTD.		
Scale:	1:500	Date:	20.10.16
Datum:	AHD	Council Ref.:	D.P.5464
Cal's:	D.Y.	Drawn:	E.F.
		Proj. Man.:	A.M.
		Client Ref.:	



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Drawing Title: **SEDIMENT AND EROSION CONTROL PLAN**  
C&R Ref: 063-16  
Drawing Ref: 063-16C-DA-103

DEVELOPMENT APPLICATION