MATERIALS

GEO LOGS: MANUFACTURED FROM 100% JUTE, COIR (COCONUT FIBRE) OR A COMBINATION OF BOTH.

STAKES: MINIMUM 50 X 50mm X 0.9m HARDWOOD. STAKE LENGTH AND WIDTH MAY NEED TO VARY SLIGHTLY DEPENDING ON THE GROUND CONDITIONS.

INSTALLATION

- 1. REFER TO APPROVED PLANS FOR LOCATION AND INSTALLATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- 2. PRIOR TO INSTALLATION ON CHANNEL/RIVER BANKS, PLACE A SUITABLE EROSION CONTROL MAT OVER ANY AREA WHERE THE LOGS ARE TO BE PLACED ABOVE AN EXPOSED SOIL.
- 3. WHEN PLACED ACROSS THE INVERT OF DRAINAGE CHANNELS, ENSURE THE LOGS ARE PLACED SUCH THAT:
- (i) THE CREST OF THE DOWNSTREAM LOG IS LEVEL WITH THE CHANNEL INVERT AT THE IMMEDIATE UPSTREAM SOCK (IF ANY).
 (ii) EACH LOG CHECK DAM EXTENDS UP THE CHANNEL BANKS SUCH THAT THE CREST OF THE CHECK DAM AT ITS LOWEST POINT IS LOWER THAN GROUND LEVEL AT EITHER END OF THE CHECK DAM.
- 4. WHEN PLACED ALONG A CHANNEL/RIVER BANK, DO NOT RECESS THE LOG MORE THAN 1/3 THE LOG DIAMETER INTO THE BANK.
- 5. ENSURE THE LOGS ARE PLACED TIGHTLY, END TO END.
- 6. WHERE PRACTICAL, THE EXTREME ENDS OF A ROW OF LOGS SHOULD BE ROTATED UP THE BANK AND SECURED WELL WITH STAKES.
- 7. SECURE THE LOGS BY DRIVING THE STAKES BETWEEN THE OUTER NETTING AND THE CORE MATERIAL EACH SIDE OF THE LOGS AND SECURED INTO THE GROUND, NOT THROUGH THE CENTRE OF THE LOG.

- 8. ENSURE THE SPACING OF STAKES (ONE ON EITHER SIDE) DOES NOT EXCEED AN INTERVAL OF 1m.
- 9. ONCE DRIVEN INTO THE GROUND, THE STAKES SHOULD IDEALLY SIT AT LEAST TWO-THIRDS BELOW THE GROUND AND ONE-THIRD ABOVE, AND IDEALLY SIT FLUSH WITH THE TOP OF THE LOG.
- 10. WHERE DIRECTED, INTERLACE COIR ROPE, GALVANISED WIRE, OR PLASTIC TREE TIES BETWEEN THE STAKES TO PROVIDE ADDITIONAL ANCHORAGE.
- 11. FILL AND SHAPE BEHIND THE LOGS IF REQUIRED.
- 12. IF STREAM FLOWS ARE LIKELY TO OVERTOP THE LOGS, THEN TAKE APPROPRIATE STEPS TO PREVENT HIGH VELOCITY FLOW ALONG THE LANDWARD SIDE OF THE LOGS. THIS CAN BE ACHIEVED WITH THE PLACEMENT OF ROCK CHECKS AT A SPACING NOT EXCEEDING 3m, OR THE PLACEMENT OF LOGS LATERALLY UP THE CHANNEL BANK.

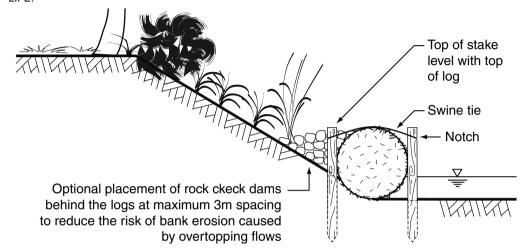
MAINTENANCE

- 1. WHILE ON-SITE WORKS CONTINUE, INSPECT ALL GEO LOGS PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER SIGNIFICANT RUNOFF PRODUCING STORMS OR OTHERWISE AT WEEKLY INTERVALS.
- 2. REPAIR OR REPLACE DISPLACED LOGS THAT ARE LIKELY TO CAUSE EROSION PROBLEMS.

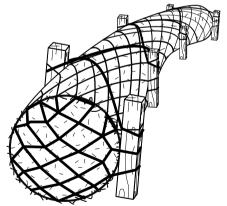
POST INSTALLATION MONITORING

- 1. MONITORING OF WORKS CAN INVOLVE SEVERAL DIFFERENT TECHNIQUES, SUCH AS PHOTO POINT MONITORING, AERIAL PHOTOGRAPHIC MONITORING, MEASURING PLANT SURVIVAL AND GROWTH, AND FLORA AND FAUNA SURVEYING.
- 2. INSPECT AND MAINTAIN GEO LOGS AFTER EACH HIGH FLOW EVENT FOR THE FIRST YEAR. MAINTENANCE MAY INVOLVE RESECURING LOGS, REPLACING LOGS, AND REPAIRING BREAKS IN THE NETTING.

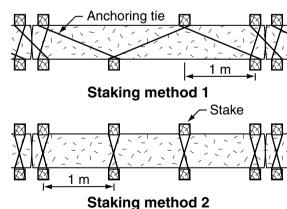
3. ANY NON-BIODEGRADABLE OR POTENTIALLY HAZARDOUS MATERIALS (INCLUDING HARDWOOD STAKES AND SYNTHETIC TWINE OR NETTING) SHOULD BE REMOVED ONCE WORKS HAVE REACHED THE END OF THEIR LIFE.



(a) Typical placement of geo log at toe of stream bank



(b) Typical anchorage of geo log



(c) Methods of stake placement

D	rawn:	Date:		
	GMW	May-10	Geo Logs (coir logs)	Log-01