MATERIALS – **EMBANKMENT:**
EARTH FILL: CLEAN SOIL WITH EMERSON CLASS 2(1), 3, 4, OR 5, AND FREE OF ROOTS, WOODY VEGETATION, ROCKS AND OTHER UNSUITABLE MATERIAL. SOIL WITH EMERSON CLASS 4 AND 5 MAY NOT BE SUITABLE DEPENDING ON PARTICLE SIZE DISTRIBUTION AND DEGREE OF DISPERSION. CLASS 2(1) SHOULD ONLY BE USED UPON RECOMMENDATION FROM GEOTECHNICAL SPECIALIST. THIS SPECIFICATION MAYBE REPLACED BY AN EQUIVALENT STANDARD BASED ON THE EXCHANGEABLE SODIUM PERCENTAGE.

MATERIALS – **INLET AND INTERNAL BAFFLES:**
FABRIC (WOVEN): POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700mm IN WIDTH AND A MINIMUM UNIT WEIGHT OF 140GSM. THE FABRICS SHOULD CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).

FABRIC (PERMEABLE):

(i) KNITTED HIGH-DENSITY POLYETHYLENE SHADE CLOTH WITH 30 TO 50% NOMINAL SHADE, AND 90 TO 200GSM – COMPOSITE KITTED FABRICS WITH TAPE FILLER OR MONO-FILAMENT FABRICS MAYBE USED;

(ii) KITTED OR WOVEN PRIVACY FENCE MESH (SHADE CLOTH) 90 TO 200GSM;

(iii) LENO WEAVE POLYPROPLENE SAFETY MESH 60 TO 150GSM (NOT POLYETHYLENE WELDED OR DRAWN MESH).

FABRIC REINFORCEMENT: WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm. SUPPORT POSTS/STAKES: 1500mm^2 (MIN) HARDWOOD, 2500mm^2 (MIN) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

INSTALLATION
1. REFER TO APPROVED PLANS FOR LOCATION, SIZE, AND CONSTRUCTION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, SIZE OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. CLEAR THE LOCATION OF THE SEDIMENT TRAP. REMOVE TREES, STUMPS, ROOTS AND OTHER SURFACE AND SUB-SURFACE MATTER THAT WOULD INTERFERE WITH INSTALLING AND MAINTAINING THE TRAP.

3. IF THE PROPOSED EARTH EMBANKMENT EXCEEDS A HEIGHT OF 1m, THEN CLEAR, GRUB AND STRIP TOPSOIL FROM THE EMBANKMENT FOOTPRINT. APPROPRIATELY SCARIFY (ROUGHEN) THE EARTH AND/OR EXCAVATE A CUT-OFF TRENCH ALONG THE CENTRELINE OF THE EMBANKMENT.

4. ENSURE THE FILL MATERIAL CONTAINS SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION.

5. PLACE FILL MATERIAL IN 150 TO 250mm CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND THEN COMPACT IT. UNLESS OTHERWISE SPECIFIED ON THE APPROVED PLANS, COMPACT THE SOIL AT ABOUT 1-2% WET OF OPTIMUM AND TO 95% MODIFIED OR 100% STANDARD COMPACTION.

6. INSTALL THE LOW-FLOW OUTLET SYSTEM. IF THE OUTLET SYSTEM INVOLVES THE CONSTRUCTION OF A ROCK FILTER DAM, THEN REFER TO SEPARATE SPECIFICATIONS FOR CONSTRUCTION OF ROCK FILTER DAMS.

7. IF REQUIRED BY THE PLANS, INSTALL ANY INTERNAL BAFFLES AND SPILL-THROUGH WEIRS, INCLUDING:

(i) SECURING THE SUPPORT POSTS INTO THE GROUND SPACED NO GREATER THAN 1.5m;

(ii) ENSURING THE MESH AND FABRIC ARE ATTACHED TO THE UPSTREAM FACE OF THE SUPPORT POSTS;

(iii) WHEREVER POSSIBLE, CONSTRUCTING THE BAFFLES FROM A CONTINUOUS ROLL OF FABRIC;

(iv) SECURELY ATTACHING THE FABRIC TO THE SUPPORT POSTS USING 25mm STAPLES.

8. PLACE A SUITABLE MARKER POST, AT LEAST A 100mm WIDE, TO INDICATE THE DEPTH AT WHICH ACCUMULATED SEDIMENT MUST BE REMOVED.

9. INSTALL ALL APPROPRIATE MEASURES TO MINIMISE SAFETY RISKS TO ON-SITE PERSONNEL AND THE PUBLIC CAUSED BY THE PRESENCE OF THE POND. AVOID THE USE OF STEEP, SMOOTH INTERNAL BANK SLOPES.

MAINTENANCE
1. INSPECT THE POND REGULARLY AND AT LEAST DAILY DURING DE-WATERING OPERATIONS. MAKE REPAIRS AS NEEDED TO THE POND, ITS OUTLET SYSTEM AND EMBANKMENTS.

2. CHECK THE EMBANKMENT FOR LEAKS, AND REPAIR AS NECESSARY.

3. CHECK THE EMBANKMENT FOR EXCESSIVE SETTLEMENT, SLUMPING OF THE SLOPES AND MAKE ALL NECESSARY REPAIRS.

4. CLEAN OUT ACCUMULATED SEDIMENT WHEN IT REACHES THE TOP OF THE INDICATOR POST OR 10% OF THE POND DEPTH.

5. PLACE SEDIMENT IN A SUITABLE DISPOSAL AREA, OR IF APPROPRIATE, MIX WITH ON-SITE SOIL.

6. DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION OR POLLUTION HAZARD.

7. IF A ROCK FILTER DAM IS USED AS AN OUTLET STRUCTURE, THEN MAINTAIN THE OUTLET STRUCTURE IN ACCORDANCE WITH THE SEPARATE SPECIFICATIONS PROVIDED FOR ROCK FILTER DAMS.

REMOVAL
1. REMOVE ALL MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

2. REHABILITATE/REVEGETATE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

Drawn:	Date:		
GMW	Apr-10	Settling Pond (De-watering)	SEP-03