

GENERAL NOTES (G):

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND COUNCIL CIVIL SPECIFICATIONS.
- G2. THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR ENGINEERING PURPOSES ONLY. ALL LEVELS ARE IN METERS UNO. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. ENGINEERS' DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ALL DISCREPANCIES SHALL BE REFERRED TO THE DESIGN ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION.
- G3. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE BCA, RELEVANT AUSTRALIAN STANDARDS, LOCAL COUNCIL AND OTHER AUTHORITIES SPECIFICATIONS EXCEPT WHERE VARIED BY THE PROJECT CONTRACT.
- G4. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS. THE PCA SHALL PROVIDE A LIST OF CRITICAL STAGE INSPECTIONS REQUIRED TO BE UNDERTAKEN BY ENGINEER.
- G5. COUNCILS TREE PRESERVATION REQUIREMENTS ARE TO BE STRICTLY ADHERED TO. NO TRESS SHALL BE REMOVED WITHOUT COUNCIL CONSENT OR PERMIT OBTAINED.
- G6. CATCH DRAINS ARE TO BE CONSTRUCTED AS REQUIRED BY COUNCIL'S ENGINEER. SUITABLE EASEMENTS TO DRAIN WATER ARE TO BE PROVIDED OVER DRAINAGE LINES THROUGH ALLOTMENTS AND PIPE TO BE LOCATED CENTRALLY, WHERE REQUIRED BY DESIGN OR UNO.
- G7. MAKE SMOOTH TRANSITION WITH ALL EXISTING WORK TO THE SATISFACTION OF COUNCIL.
- G8. VEHICLE ACCESS AND ALL SERVICES ARE TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION.
- G9. ADEQUATE PROVISION TO BE MADE FOR SCOURING AND SEDIMENTATION TO ALL DRAINAGE WORKS AS DIRECTED.
- G10. ANY VARIATION TO THE WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY THE DESIGN ENGINEER PRIOR TO THEIR COMMENCEMENT.
- G11. THE CONTRACTOR IS TO ENSURE THAT ALL WORKS ARE CARRIED OUT IN ACCORDANCE WITH THE NSW OCCUPATIONAL HEALTH AND SAFETY ACT.
- G12. ALL EXISTING SERVICES AND UTILITIES SHALL BE LOCATED AND RECORDED PRIOR TO COMMENCEMENT OF WORKS. ALL INFORMATION SHOWING SERVICES AND UTILITIES IS FOR PLANNING ONLY. PUBLIC UTILITY SERVICES ARE TO BE ADJUSTED AS NECESSARY AT THE CONTRACTORS EXPENSE.
- G13. THE CONTRACTORS WORK AREA IS CONFINED TO THE SITE AND AS SHOWN ON THESE DRAWINGS. ALL EXISTING STRUCTURES, IMPROVEMENTS STOCKPILES, RUBBISH AND DEBRIS SHALL BE REMOVED AS SPECIFIED.
- G14. ALL FINISHED GRADING SHALL BE TO THE SATISFACTION OF THE SUPERINTENDENT, BUT NOT BEYOND THE EXTENT OF WORKS.
- G15. ALL WORKS WITHIN THE VICINITY OF A WATERCOURSE SHOULD BE REFERRED TO THE NSW OFFICE OF WATER FOR A CONTROLLED ACTIVITY APPROVAL.

EARTHWORKS (EW):

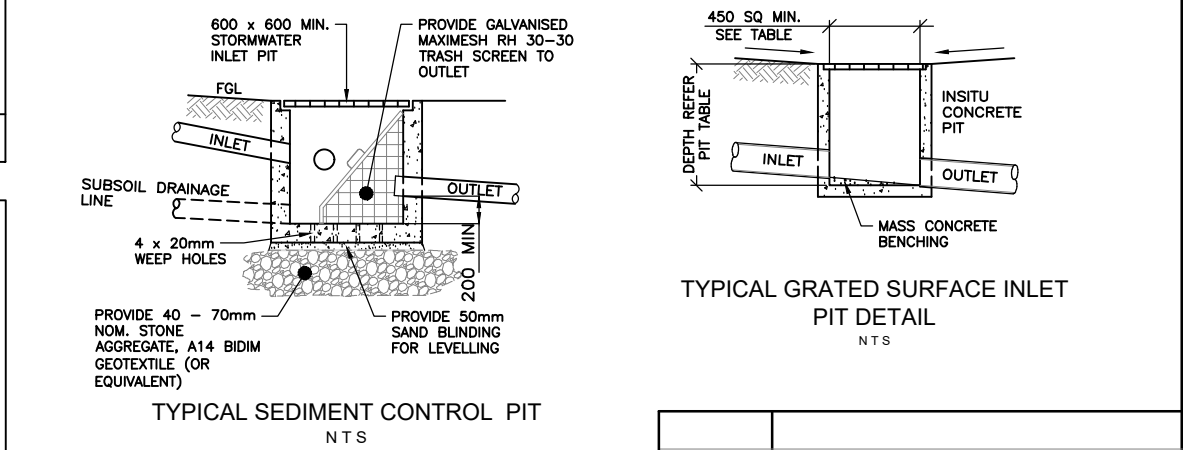
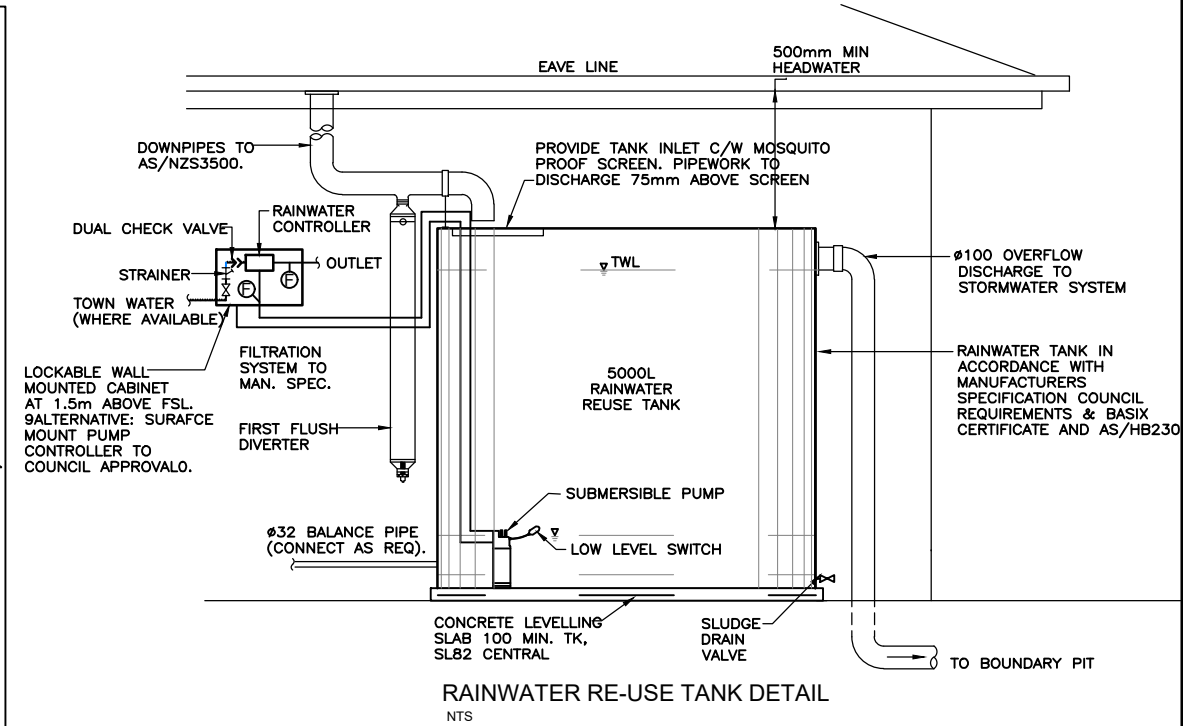
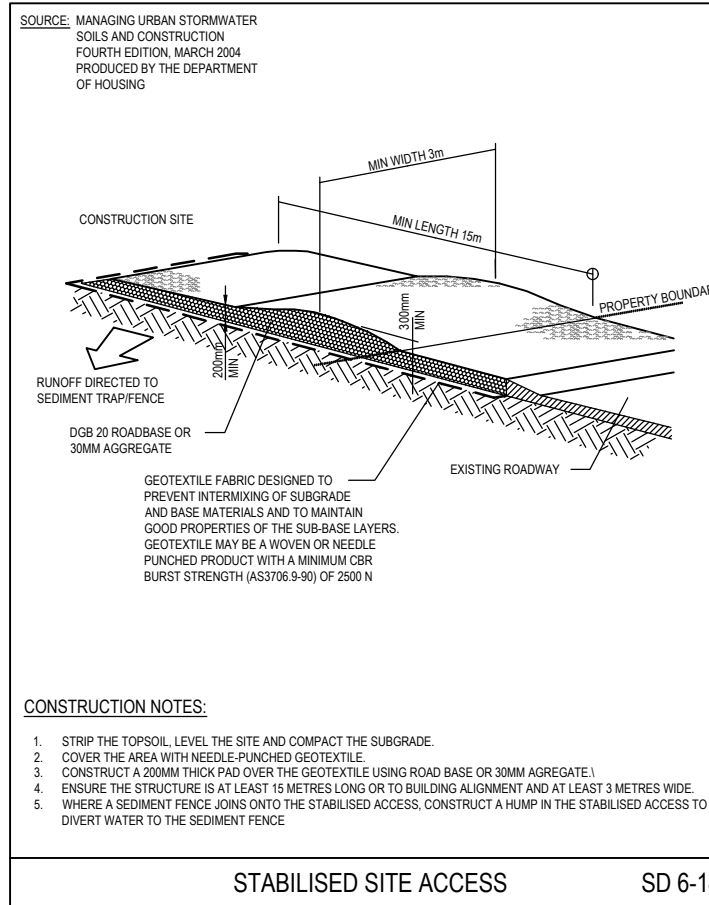
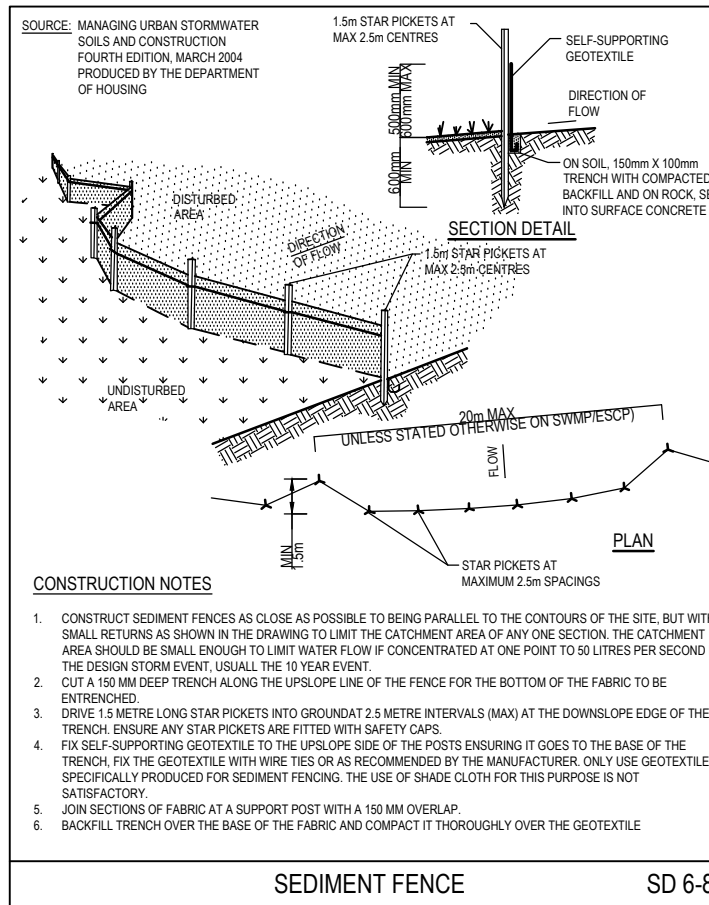
- EW1. WITHIN EXTENTS OF WORK AREA, STRIP ALL TOPSOIL & STOCKPILE FOR LATER RE-USE (OR DISPOSE). REMOVE ALL STRUCTURES & DEBRIS, EXCAVATE, STOCKPILE OR DISPOSE OF MATERIAL TO EXPOSE SUB-GRADE AS SPECIFIED IN CUT AREAS.
- EW2. FOLLOWING STRIPPING THE EXPOSED SUB-GRADE MATERIALS ARE TO BE INSPECTED TO IDENTIFY ANY UNSOUND AREAS AND WHICH ARE TO BE REMOVED AND REINSTATED TO SPECIFICATION. BENCH & PROOF ROLL IN ACCORDANCE WITH AS3798 & PRESENT TO SUPERINTENDENT FOR APPROVAL.
- EW3. COMPACT SUB-GRADE TO 100% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ IN ACCORDANCE WITH AS 3798. SAND SUB-GRADES COMPACT TO DENSITY INDEX AS SPECIFIED IN THE CIVIL SPECIFICATION, REPORTS OR SUPERINTENDENTS INSTRUCTION.
- EW4. TESTING OF ALL COMPACTED FILL, SUB-GRADES AND PAVEMENTS, TO BE ALLOWED FOR BY THE CONTRACTOR AND BY NATA GEOTECHNICAL LABORATORY. TEST RESULTS TO BE SUPPLIED TO THE CERTIFYING ENGINEER.
- EW5. ALL PAVEMENTS OR BUILDING PADS TO BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT OR AS SPECIFIED ON THE DRAWINGS. THE CONSULTING ENGINEER IS TO INSPECT THE WORKS FOLLOWING COMPLETION OF BULK EARTHWORKS AND PRIOR TO COMMENCEMENT OF DETAILED EARTHWORKS.
- EW6. WHERE FILL IS PROPOSED ON NATURAL SURFACE SLOPES EXCEEDING 1V:4H GRADIENT, BENCHES ARE TO BE CUT TO PREVENT SLIPPING OF FILL AND AS REQUIRED BY THE PCA'S INSPECTOR OF WORKS.
- EW7. ALL BATTERS ARE TO BE SCARIFIED WITH ADHESION OF TOPSOIL TO THE BATTER FACE.
- EW8. ANY WORKS REQUIRING INTERFERENCE WITH ADJOINING LOTS ARE TO BE CONSENTED IN WRITING, PRIOR TO THE COMMENCEMENT OF WORKS.
- EW9. THE CONTRACTOR IS RESPONSIBLE FOR SET-OUT AND LEVEL CONTROL. ANY DISCREPANCIES BETWEEN DESIGN AND SITE CONDITIONS TO BE RESOLVED BY THE PCA'S INSPECTOR OF WORKS PRIOR TO PROCEEDING.
- EW10. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH AS3798. THE GEOTECHNICAL ENGINEER IS TO HAVE CLASS 2 RESPONSIBILITY PER AS3798 APP B, AND SHALL CERTIFY COMPLIANCE OF THE EARTHWORKS WITH DRAWINGS AND SPECIFICATIONS AT COMPLETION OF THE WORKS.

STORMWATER DRAINAGE (SW):

- SW1. ALL STORMWATER DRAINAGE TO BE IN ACCORDANCE WITH AS 3500.3.
- SW2. UPVC PIPES AS SPECIFIED TO BE IN ACCORDANCE WITH AS 1254. CONCRETE PIPES AS SPECIFIED TO BE IN ACCORDANCE WITH AS 1342.
- SW3. CONTRACTOR IS TO PRESENT WORK AS EXECUTED SURVEY PLANS TO THE SUPERINTENDENT SHOWING LOCATION EXTENT AND LEVEL OF THE PITS/ON SITE DETENTION/ BIO-RETENTION SYSTEMS AS APPLICABLE TO EACH PROJECT: AT COMPLETION OF SUB-GRADE EXCAVATION AND UPON COMPLETION OF ALL WORKS.
- SW4. ALL CONCRETE PIPES ARE TO BE RUBBER RING JOINTED UNLESS NOTED OTHERWISE.
- SW5. THE MINIMUM SIZE OF STORMWATER DRAINS SHALL NOT BE LESS THAN DN90 FOR CLASS 1 BUILDINGS AND DN100 FOR OTHER CLASSES OR AS DIRECTED BY THE REGULATORY AUTHORITY.
- SW5. MINIMUM GRADIENT OF ALL STORMWATER PIPES SHALL BE AS FOLLOWS;
 - (a) DN90 TO DN150 1% MIN.
 - (b) DN225 0.5% MIN GRADE.
 - (c) DN300 0.4% MIN GRADE.
 - (d) DN375 0.35% MIN GRADE.
- SW6. PIPE BEDDING MATERIAL IS TO COMPLY WITH AS 2032 OR AS 3725. COVER REQUIRED TO PIPES IS 450mm IN ROADS AND CARPARKS AND 300mm ELSEWHERE UNO.
- SW7. TRENCHES ARE TO BE BACKFILLED WITH APPROVED FILL ONLY. FILL IS TO BE COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY IN ACCORDANCE WITH AS1289.5.1.1
- SW8. CONCRETE BULKHEADS ARE TO BE INSTALLED ON ALL PIPES WITH GRADES >15%.
- SW9. SUBSOIL DRAINS TO BE LAID AT A MINIMUM GRADE OF 1.0% UNO. BACKFILL TO BE FREE-DRAINING GRANULAR MATERIAL TO WITHIN 200mm OF THE SURFACE UNO. COMPACTED IN ACCORDANCE TO RELEVANT STANDARDS AND GEOTECHNICAL REPORT. OVERLAY BACKFILL WITH APPROVED GEOFABRIC TO MAINTAIN SEPARATION FROM TOPSOIL.
- SW10. CONTRACTOR TO CONFIRM INVERT LEVEL OF ALL RECEIVING PIT/PIPE/OUTLET/CHANNEL PRIOR TO COMMENCEMENT OF ANY WORK.
- SW11. ALL CONNECTIONS TO PITS, HEADWALLS OR OTHER, EITHER EXISTING OR PROPOSED, WITHIN THE SITE OR STUDY AREA TO BE GROUTED OR SEALED TO THE SATISFACTION OF COUNCIL OR THE SUPERINTENDENT.
- SW12. SEALED SCREW CAP CLEAR OUT INSPECTION OPENINGS (I.O.) TO BE PROVIDED AT BENDS AND THE LOWEST POINT ON ALL CHARGED STORMWATER LINES. ALL CHARGED STORMWATER LINES TO BE SOLVENT WELDED JOINTS.

EROSION AND SEDIMENT CONTROL (ES):

- ES1. INSTALL SEDIMENT & EROSION CONTROLS AS PER DETAILS ON THE DRAWINGS PRIOR TO COMMENCEMENT OF WORKS.
- ES2. ALL SEDIMENT & EROSION CONTROLS SHALL BE ERECTED DOWNSLOPE OF ANY DISTURBED AREA TO PREVENT SEDIMENT/RUNOFF FROM LEAVING THE SITE. ALL SEDIMENT CONTROL STRUCTURES/MEASURES SHALL BE CHECKED AND MAINTAINED DAILY AND IMMEDIATELY AFTER RAINFALL. SEDIMENT BUILD UP TO BE REMOVED & CONTROLS REPAIRED WHERE NECESSARY
- ES3. ALL EXPOSED/EXCAVATED AREAS SHALL BE STABILISED BY TURF/MULCH/SEED IMMEDIATELY AFTER CONSTRUCTION STAGE. SEDIMENT CONTROL SHALL BE MAINTAINED UNTIL GROUND COVER IS ESTABLISHED.
- ES4. ALL TURFING SHALL BE LAID PERPENDICULAR TO DIRECTION OF SURFACE RUN-OFF FLOW, AND PINNED WITH WIRE "U" SHAPED PINS OF LENGTH 200mm AT MAX 1m INTERVALS WHEN ON BATTERS OR GRADES EXCEEDING 5%.
- ES5. SEDIMENT BASIN IS TO BE FLOCCULATED WITH GYPSUM AND PUMPED DRY AFTER RAINFALL IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE NEW SOUTH WALES LANDCOM PUBLICATION 'SOILS AND CONSTRUCTION' (THE 'BLUE BOOK') AND COUNCILS REQUIREMENTS.



RAINWATER REUSE NOTES (RR):

- RR1. RAINWATER SUPPLY PLUMBING TO BE CONNECTED TO OUTLETS AS REQUIRED BY COUNCIL AND BASIX CERTIFICATE.
- RR2. TOWN WATER CONNECTION TO RAINWATER TANK TO BE TO THE SATISFACTION OF THE WATER AUTHORITY AND MAY REQUIRE PROVISION OF:
 - (a) PERMANENT AIR GAP
 - (b) BACKFLOW PREVENTION DEVICE,
 - (c) NO DIRECT CONNECTION BETWEEN TOWN WATER AND RAIN WATER SUPPLY,
 - (d) APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE (500kPA) AT THE RAINWATER TANK.
- RR3. PROVIDE AT LEAST ONE EXTERNAL HOSE COCK ON TOWN WATER SUPPLY FOR FIREFIGHTING.
- RR4. PROVIDE APPROVED FLOAT VALVES OR SOLENOID VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE TOP UP.
- RR5. ALL PLUMBING WORKS TO BE CARRIED OUT BY LICENCED PLUMBER IN ACCORDANCE WITH AS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- RR6. PRESSURE PUMP ELECTRICAL CONNECTION BY LICENCED ELECTRICIAN.
- RR7. ROOF RUNOFF TO BE DIRECTED TO THE RAINWATER TANK ONLY. SURFACE WATER INLETS ARE NOT TO BE CONNECTED.
- RR8. PIPE MATERIALS FOR RAINWATER SUPPLY TO COMPLY WITH AS3500 PART 2 AND CLEARLY AND PERMANENTLY IDENTIFIED AS 'RAINWATER' IN ACCORDANCE WITH AS2648 AND AS1345.
- RR9. EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK TO BE PERMANENTLY LABELED 'RAINWATER' ON METALLIC SIGN IN ACCORDANCE WITH AS1319.
- RR10. ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND VERMIN ENTRY.

DATE:	01 - CC. ISSUE
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