MULTI RESIDENTIAL DEVELOPMENT
261- 263 BALWYN ROAD, BALWYN NORTH, VIC. 3104

GENERAL

1. DO NOT SCALE FROM THESE DRAWINGS, USE WRITTEN DIMENSIONS ONLY.
2. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH:
   a. ARCHITECTURAL AND OTHER SERVICES PLANS AND SPECIFICATIONS.
   b. SITE DERIVED INFORMATION.
   c. STRUCTURAL PLANS AND SPECIFICATIONS.
   d. ANY ADDITIONAL INSTRUCTIONS/INFORMATION SUPPLIED DURING THE COURSE OF CONSTRUCTION.
   e. RELEVANT GEOTECHNICAL REPORT.
3. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). T.B.M's ARE SHOWN ON THE PLANS, ALL LEVELS SHALL BE RELATED TO THESE.
4. THE CONTRACTOR IS TO ENSURE THAT ALL FOOTPATHS, KERBS, ROAD PAVEMENT, NATURE STRIPS, STREET FURNITURE AND SERVICES DAMAGED DURING CONSTRUCTION ACTIVITIES ARE MADE GOOD TO THE SATISFACTION OF THE COUNCIL REPRESENTATIVE.
5. THE CONTRACTOR IS TO COMPLY WITH THE EPA AND COUNCIL REQUIREMENTS FOR NOISE AND AIRBORNE POLLUTION.
6. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO ENSURE THAT ALL REQUIRED PERMITS ARE ISSUED BY THE RELEVANT AUTHORITIES.
7. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS, AND IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA, COUNCIL STANDARDS AND LOCAL LAWS.
8. THE CONTRACTOR IS TO ENSURE THAT A LICENSED SURVEYOR IS ENGAGED TO POSITION WORKS AND PROVIDE AS CONSTRUCTED PLANS.
9. NO CONTAMINATED FILL IS TO BE IMPORTED ONTO THIS SITE.
10. THE CONTRACTOR IS TO ENSURE THAT POLLUTION CONTROL MEASURES ARE IN PLACE DURING CONSTRUCTION AND THAT THEY COMPLY WITH EPA BEST PRACTICE GUIDELINES.
11. STRUCTURAL FILL MUST BE PLACED IN ACCORDANCE WITH NOTES AND AS3798-2007.
12. THE CONTRACTOR IS TO NOTIFY THE DIRECTOR OF ENGINEERING AT COUNCIL OF HAULAGE ROUTES AND SEEK APPROVALS AS REQUIRED.
13. THE CONTRACTOR IS TO ENSURE THAT ALL MAINTENANCE DEPOSITS AND BONDS ARE PAID TO THE RELEVANT AUTHORITIES AS REQUIRED.
14. ALL CONSTRUCTION WORK IS TO BE LIMITED TO AUTHORITY APPROVED WORKING HOURS.
15. ANY ROAD/PART ROAD CLOSURES ARE TO BE APPROVED BY COUNCIL PRIOR TO WORKS COMMENCING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY COUNCIL WITH ANY DOCUMENTATION, SUCH AS TRAFFIC MANAGEMENT PLANS, AS REQUIRED.
16. ALL TESTING TO BE AS DIRECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER AND COSTS TO BE INCLUDED IN TENDER, INCLUDING THE SERVICE OF AN APPROVED GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER WILL BE REQUIRED TO ISSUE A COMPLIANCE CERTIFICATE CONFIRMING THAT THE WORKS HAVE BEEN COMPACTED TO THE STANDARD SPECIFIED.

    ALLOW FOR THE FOLLOWING COMPACTION TESTS IN TENDER (AS A MINIMUM):

    i. SUBGRADE (CUT OR FILL) – 1 TEST PER 600 SQ M PER LAYER.
    ii. CRUSHED ROCK COURSES – 1 TEST PER 400 SQ M PER LAYER.
    iii. ASPHALT – AS PER VIC ROAD STANDARD REQUIREMENTS.
    iv. TRENCH BEDDING AND BACKFILL – 1 TEST PER 30 M PER LAYER.

17. PROVIDE CLAY 'PLUG' TO ALL SERVICE TRENCHES WHERE ANY PIPE, DUCT OR CABLE ENTERS THE BUILDING TO PREVENT INGRESS OF WATER UNDER BUILDING

STORMWATER DRAINAGE

1. ALL DRAINAGE PIPES ARE TO BE R.C. CLASS '2', F.R.C. OR U.P.V.C. SN8 UNLESS NOTED OTHERWISE ON PLAN. ALL R.C. AND F.R.C. PIPES ARE TO BE RUBBER RING JOINTED (R.R.J.)
2. ALL PITS ARE TO BE CONSTRUCTED TO **BOROONDARA CITY COUNCIL** STANDARDS AND ALL COVERS ARE TO BE IN ACCORDANCE WITH AS3996-2006. PITS BETWEEN 1.0m AND 1.5m DEEP ARE TO BE FITTED WITH STEP IRONS. PITS IN EXCESS OF 1.5m DEEP ARE TO BE FITTED WITH LUGS FOR STEP LADDER. CONCRETE FOR ALL PITS TO BE AT LEAST GRADE F'C = 20MPa U.N.O.
3. ALL LEVELS AND DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS AND ANY DISCREPANCIES ARE TO BE REFERRED TO THE ENGINEER FOR A DECISION.
4. THE CONTRACTOR IS TO VERIFY THE LOCATION AND LEVEL OF SERVICES PRIOR TO ANY EXCAVATION WORKS IN THE VICINITY OF THESE SERVICES. ALL CLEARANCES BETWEEN SERVICES ARE TO BE MET IN ACCORDANCE WITH AS3500.3:2015 SECTION 7.2.7.
5. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL SERVICES PRIOR TO COMMENCEMENT OF WORKS.
6. THE CONTRACTOR IS TO CONTACT ALL RELEVANT AUTHORITIES 48 HOURS PRIOR TO ANY EXCAVATION WORKS IN THE VICINITY OF THE IDENTIFIED SERVICES.
7. ANY EXCAVATED TRENCHES IN EXCESS OF 1.5M IN DEPTH ARE TO BE ADEQUATELY SHORED TO PREVENT COLLAPSE DURING WORKS.
8. ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL APPROVED PLANS AND STANDARD DRAWINGS.
9. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY INSPECTIONS AND APPROVALS FROM THE CITY ENGINEER AND ALL OTHER RELEVANT AUTHORITIES.
10. U.N.O. TRENCH BACKFILL SHOULD BE COMPACTED TO NOT LESS THAN 95% OF THE DRY DENSITY RATIO FOR STANDARD COMPACTION (COHESIVE SOILS) OR 70% OF THE MINIMUM DENSITY INDEX FOR STANDARD COMPACTION (COHESIONLESS SOIL), IN ACCORDANCE WITH AS3798:2007. REFER TO SECTION DETAILS FOR DRAINAGE TRENCHES BACKFILL DETAILS.
11. WHEN USING PRECAST OR PREFABRICATED UNITS, THE CONTRACTOR IS TO SEEK THE ENGINEERS APPROVAL BEFORE INSTALLATION.
12. WHEN REMOVING ANY REDUNDANT PIPES AND PITS, THE CONTRACTOR MUST BACKFILL IN ACCORDANCE WITH TRENCH BACKFILL NOTES ABOVE.
13. CONTRACTOR IS TO PROVIDE A SAMPLE OF GRATES TO BE PLACED ON OR ADJACENT TO PATHS FOR APPROVAL BY THE ARCHITECT PRIOR TO INSTALLATION.
14. COUNCIL IS TO BE GIVEN 24 HOUR NOTICE PRIOR TO INSPECTIONS OF THE FOLLOWING ITEMS:
    a. BREAK IN AND PIPE TO PIT CONNECTION, PRIOR TO BACKFILL.
    b. COMPLETION OF WORKS.
15. ALL PLUMBING AND DRAINAGE WORK IS TO BE COMPLETED IN ACCORDANCE WITH AS3500:2015 AND ANY OTHER RELEVANT CODES OF PRACTICE FOR SERVICES AND ASSOCIATED WORKS.
16. ALL STEEL MEMBERS INCLUDING GRATES AND LINTELS ARE TO BE HOT DIPPED GALVANISED.
17. ALL MINIMUM PIPE GRADES ARE TO BE IN ACCORDANCE WITH AS3500.
18. GRATED DRAINAGE PITS ARE TO BE LOCATED IN SAG POINTS (LOW POINTS), THE CONTRACTOR IS TO ENSURE EVEN FALLS ARE PROVIDED TO PITS AND LOCAL GRADES FORMED IF REQUIRED TO ELIMINATE DEAD DRAINAGE SPOTS.
19. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND LEVEL OF ALL EXISTING DISCHARGE POINTS PRIOR TO CONSTRUCTION.

THE CONTRACTOR IS TO ENGAGE THE GEOTECHNICAL ENGINEER TO APPROVE ALL FILL MATERIALS PRIOR TO PLACEMENT, SUBGRADE PRIOR TO PLACEMENT OF FILL, COMPACTION OF FILL AND FOUNDING LEVELS OF FOOTINGS ETC.

SUBGRADE PREPARATION AND EARTHWORKS - PAVEMENTS

REFER SOIL REPORT BY: .....

1. UNDER ALL PAVEMENT AREAS, STRIP ALL TOPSOIL AND PREPARE FOR PAVEMENT AS PER DETAIL.
2. CUT AND FILL AS REQUIRED TO PRODUCE FINISHED SURFACE LEVEL AS SPECIFIED LESS PAVEMENT THICKNESS AS SHOWN ON DRAWINGS.
3. COMPACT CUT SURFACE TO 98% STANDARD MAXIMUM DRY DENSITY (SMDD).
4. THE MOISTURE CONTENT OF THE SUBGRADE OR FILL SHOULD BE WITHIN 85%-115% OF THE STANDARD OPTIMUM MOISTURE CONTENT AT THE TIME OF COMPACTION.
5. PRIOR TO PLACEMENT OF FILL OR PAVEMENT REMOVE AND REPLACE SOFT OR UNSTABLE SUBGRADE WITH CLEAN WELL GRADED APPROVED MATERIAL TO 98% SMDD. PROOF ROLL SUBGRADE SURFACE WITH A DUAL WHEELED PNEUMATIC TYRED VEHICLE (MIN. 9.4 TONNE LOADED AXLE) AND MAKE GOOD TO ANY SOFT SPOTS.
6. EXCAVATED AND PREPARED SURFACES UNDER ALL PAVEMENTS SHALL BE SPRAYED WITH AN APPROVED WEED KILLER. CARE MUST BE TAKEN TO AVOID CONTAMINATING GARDEN BEDS AND LAWN AREAS.
7. FILLING SHALL BE CLEAN WELL GRADED GRANULAR MATERIAL COMPACTED TO 95% MMDD IN MAX 200mm LOOSE THICKNESS LAYERS, OR APPROVED IMPORTED CLAY FILL COMPACTED TO 98% SMDD IN 150mm LAYERS.
8. CUT OR BACKFILL AREA BEHIND KERBING TO TOP OF KERB AND GRADE TO 1 IN 4 MAX SLOPE TO MATCH EXISTING SURFACE LEVELS.
9. CONTRACTOR IS TO SUPPLY A RATE TO DEAL WITH SOFT SPOTS, THE RATE IS TO INCLUDE EXCAVATION AND REMOVAL OF SPOIL OFF SITE; RATE IS TO BE CALCULATED PER CUBIC METRE OF BACKFILL.
10. 98%SMDD IS APPROXIMATELY EQUIVALENT TO 95%MMDD OR 75% MINIMUM DENSITY INDEX AS NOTED IN TABLE 5.1 OF AS3798-2007.

CROSS OVERS

1. CONTRACTOR IS TO ENSURE THAT ALL PERMITS ARE IN PLACE AND ALL FEES PAID PRIOR TO UNDERTAKING CONSTRUCTION WORKS.
2. CROSSING GRADE SHALL BE SUITABLE FOR A STANDARD CAR. REFER TO A COUNCIL APPROVED DETAIL.
3. PAVEMENT AND BEDDING DEPTH TO BE DETERMINED BASED ON EXISTING SOIL CONDITIONS AND IN ACCORDANCE WITH APPROPRIATE DESIGN STANDARDS AND PRACTICES. REFER TO CODE OF PRACTICE.
4. JOINTS AND DOWEL BARS ARE REQUIRED ON EITHER SIDE OF THE CROSSING AT THE INTERFACE WITH THE FOOTPATH, PROVISION SHALL BE MADE IN EXISTING CONCRETE SECTIONS BY DRILLING HOLES TO A MINIMUM DEPTH OF 150mm AND INSERTING RF12 x 300mm LONG DOWEL BARS.
5. AN APPROVED JOINT FILLER SHALL BE PLACED ON EITHER SIDE OF THE CROSSING AGAINST FOOTPATH SLABS. DOWEL BARS ARE TO HAVE AN APPROVED BOND BREAKER APPLIED TO THE END OF THE BAR INSERTED IN TO THE EXISTING CONCRETE SECTIONS.

BITUMEN PAVEMENT

1. UNLESS OTHERWISE SPECIFIED ALL PAVEMENTS ARE TO BE ASPHALT AS NOTED IN THE STANDARD SECTION DETAIL.
2. LOT TESTING SHALL BE CARRIED OUT WITH A MINIMUM OF SIX SITES WITH CHARACTERISTIC RELATIVE COMPACTION ACHIEVING THE STANDARDS OUTLINED ON PLAN AND DETAILS.
3. WHERE THE LOT TO BE TESTED IS LESS THAN 500m^2 THEN THREE TESTS MAY BE USED BUT THE MEAN OF THE RESULTS MUST BE 2% HIGHER THAN THE REQUIRED STANDARDS.
4. EACH PAVEMENT LAYER SHALL BE INSPECTED AND APPROVED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCING THE NEXT.
5. COPIES OF ALL TEST RESULTS ARE TO BE PROVIDED TO THE SUPERVISING AUTHORITY FOR DOCUMENTATION PURPOSES.

CONCRETE

1. UNLESS NOTED OTHERWISE CONCRETE CRUSHING STRENGTH AT 28 DAYS SHALL BE AT LEAST:
   a. DRAINAGE WORKS: 20MPa
   b. PAVING WORKS: 32MPa

EXTERNAL MEDIUM DUTY CONCRETE PAVEMENTS

1. ALL EXTERNAL TRAFFICABLE CONCRETE PAVEMENTS TO HAVE MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 32 MPa.
2. PAVEMENT COMPOSITION AS SHOWN ON DETAILS.
3. SUBGRADE TO BE PREPARED IN ACCORDANCE WITH RELEVANT GEOTECHNICAL REPORT. AS A MINIMUM SUBGRADE IS TO BE PROOFROLLED AND SOFT SPOTS REMOVED AND FILLED USING CRUSHED ROCK COMPACTED AS REQUIRED.
4. PLACE CONCRETE USING AN ACCEPTED VIBRATION METHOD. ALL REINFORCEMENT IS TO BE PLACED ON SUPPORT CHAIRS SPACED TO MINIMISE SAG.
5. UNLESS SPECIFIED OTHERWISE ALL SURFACE FINISHES TO BE NON SLIP STIPPLE FINISH.
6. ALL PAVEMENTS TO BE CURED IN ACCORDANCE WITH CURRENT INDUSTRY PRACTICE AND AS SPECIFIED IN AS3600.
7. ALL PAVEMENTS TO HAVE JOINTS IN ACCORDANCE WITH THE DETAILS. ALL JOINTS TO BE SEALED WITH FLEXIBLE WATERPROOF SEALANT.
8. ALL SLAB EDGES TO BE THICKENED IN ACCORDANCE WITH ATTACHED DETAIL.
10. WHEN CONCRETE FINISHES AGAINST EXISTING STRUCTURES PROVIDE 10mm ABELFLEX SEPARATOR AND FLEXIBLE SEALANT OVER.

PATHWAYS AND COURTYARDS

1. PAVING TO THESE AREAS TO BE 100mm MINIMUM THICK CONCRETE OVER 50mm CONSOLIDATED THICKNESS OF F.C.R..
2. PROVIDE TOOL JOINTS AT 1200mm MAX. C'TRS IN BOTH DIRECTIONS & AT RE-ENTRANT CORNERS.
3. SL62 REINFORCEMENT CENTRAL.
4. PROVIDE ABEL FLEX EXPANSION JOINTS AT 8400 MAXIMUM CENTRES, INTERSECTIONS AND CHANGES OF DIRECTIONS.
5. PATHWAYS AND COURTYARDS ARE TO BE PROVIDED WITH UNIFORM CROSS FALL TO GRATED PITS WHERE PROVIDED OTHERWISE PROVIDE UNIFORM CROSS FALL AWAY FROM BUILDING AT 1 IN 40 MAXIMUM GRADE.
6. REFER TO ARCHITECTURAL DRAWINGS AND LANDSCAPING DESIGN FOR ALL PATHWAY WIDTHS, EDGE DETAILING AND FINISHES.
7. LONGITUDINAL FALL TO BE MAXIMUM OF 1 IN 20.
8. WHERE REQUIRED STEP RAMPS ARE TO BE THE WIDTH OF MERGING PATHS WITH A GRADIENT NOT STEEPER THAN 1 IN 8.
9. ALL PATHWAYS ARE TO BE CONSTRUCTED OVER PROOFROLLED SUBGRADE. ALL SOFT SPOTS ARE TO BE REMOVED AND BACKFILLED WITH WELL COMPACTED CRUSHED ROCK.
10. WHEN CONCRETE FINISHES AGAINST EXISTING STRUCTURES PROVIDE 10mm ABELFLEX SEPARATOR AND FLEXIBLE SEALANT OVER.

RAINWATER TANKS

1. THE CONTRACTOR IS TO INSTALL RAINWATER TANKS TO STORE WATER COLLECTED FROM DOWN PIPES USING APPROVED UPVC TANKS.
2. TANKS ARE TO BE FITTED WITH PUMPS AND DETECTOR VALVES TO SWITCH BACK TO MAINS WATER WHEN THE TANKS ARE LOW OR EMPTY IN ACCORDANCE WITH HYDRAULIC PLANS AND SPECIFICATIONS.
3. A COUNCIL APPROVED BACK FLOW PREVENTION DEVICE IS ALSO TO BE FITTED, TO AVOID CONTAMINATION TO THE MAINS WATER SUPPLY.
4. ALL TANKS ARE TO BE INSTALLED TO THE MANUFACTURER REQUIREMENT INCLUDING THE INSTALLATION OF ANY WATER QUALITY FILTERS.
5. EACH TANK IS TO BE FITTED WITH AN OVERFLOW DISCHARGING TO A DRAINAGE PIT AS INDICATED ON PLANS.
6. THE CONTRACTOR IS TO ENSURE ANY IRRIGATION CONDUITS ARE INSTALLED PRIOR TO POURING ANY PAVEMENTS.
7. THE CONTRACTOR IS TO ENSURE THAT ALL TANKS ARE INSTALLED ON APPROVED PLINTHS OR FRAMES.
8. ALL DOWNPIPES DISCHARGING TO THE RAINWATER TANK ARE TO BE FITTED WITH LEAF GUARDS.
9. LEAF GUARDS ARE TO BE FITTED 1.0m ABOVE THE TOP OF TANK LEVELS.
10. ALL PRESSURE PIPES TO BE TESTED TO 10m OF HEAD IN ACCORDANCE WITH AS3500.

AG DRAINS

1. AG DRAINS (SUBSOIL DRAINS) ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.
2. MIN GRADE OF AG-DRAINS IS TO BE 1:200.
3. AG-DRAINS ARE TO BE FITTED WITH 150 DIA INSPECTION OPENINGS (I.O.) AT THEIR TOPMOST ENDS, AT CHANGES OF FLOW DIRECTIONS AND AT A MAXIMUM HORIZONTAL DISTANCE OF 45m.
4. INSPECTION OPENINGS ARE TO EXTEND VERTICALLY TO THE TOP OF A PAVED AREA OR WITHIN 300mm FROM THE SURFACE IN UNPAVED AREAS AND TERMINATED WITH A SCREW CAP LEGIBLY MARKED 'SW'. ADEQUATE CAST IRON PROTECTION COVERS ARE TO BE USED WHEN POSITIONED WITHIN TRAFFIC LANES OR PAVEMENT WITH VEHICLE ACCESS.
5. THE CONTRACTOR IS TO ALLOW FOR ALL AG-DRAINS AS REQUIRED AT THE REAR OF RETAINING WALLS AND EDGE OF FLEXIBLE PAVEMENTS.
6. ALL AG-DRAINS ARE TO BE WRAPPED IN GEOTEXTILE MATERIAL OR THE ENTIRE BEDDING MATERIAL IS TO BE WRAPPED WITH GEOTEXTILE FABRIC OVERLAPPING NOT LESS THAN 300mm.
7. UNLESS NOTED OTHERWISE THE EMBEDMENT MATERIAL IS TO BE 10mm NOM. DIA. CLEAN SCREENINGS FOR THE FULL DEPTH OF THE EMBEDMENT TRENCH EXCEPT FOR TOPSOIL REQUIREMENTS AS PER LANDSCAPING SPECIFICATIONS.
8. PROVIDE AG DRAINS IN GARDEN BED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS DRAWINGS AND CONNECT TO NEAREST STORMWATER PIT.

HEALTH AND SAFETY

1. IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE ALL WORKS ARE CARRIED OUT IN A SAFE MANNER. THE WORKS SHALL COMPLY WITH APPLICABLE HEALTH AND SAFETY LEGISLATION INCLUDING CODES OF PRACTICE, AUSTRALIAN STANDARDS, GUIDANCE NOTES AND WORKSAFE REQUIREMENTS.
2. THE BUILDER SHALL ENSURE A RISK ASSESSMENT HAS BEEN CARRIED OUT AND DOCUMENTED FOR ALL ACTIVITIES PERFORMED ON THE SITE. SAFE WORK PROCEDURES MUST BE DOCUMENTED AS REQUIRED BY LEGISLATION AND RELEVANT AUTHORITIES. THE BUILDER MAY NEED TO ENGAGE SUITABLY EXPERIENCED CONSULTANTS TO PREPARE A SAFE WORK PROCEDURE IF THE BUILDER IS INEXPERIENCED IN THIS FIELD OR IF THEY ARE NOT SATISFIED WITH THE METHOD PROPOSED BY THE CONTRACTOR.
3. THE WORKS SHALL BE CARRIED OUT IN A MANNER THAT ENSURES THE SAFETY OF THE PUBLIC AT ALL TIMES. SITE SAFETY REQUIREMENTS AND ARRANGEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED BY THE ARCHITECT.

AUXILIARY WORKS

1. THE CONTRACTOR IS TO SEEK COUNCIL REQUIREMENTS FOR 'NOTICES OF WORKS' WITHIN A PUBLIC ROAD RESERVE.
2. NO ROADWORKS ARE TO COMMENCE UNTIL ALL TEMPORARY SIGNS AND ASSOCIATED ITEMS ARE IN PLACE AS APPROVED.
3. ALL DISTURBED AREAS ARE TO BE REINSTATED AND SHAPED AS DIRECTED. ALL GRASSED AREAS SHALL BE TOP DRESSED WITH A MINIMUM DEPTH OF 75mm OF APPROVED TOPSOIL, RAKED AND SEEDED.
4. ALL ROADSIDE AREAS SHALL BE MAINTAINED FOR A MINIMUM OF THREE MONTHS OR UNTIL THEY ARE RE-ESTABLISHED TO COUNCIL SATISFACTION.
5. MAINTENANCE WORKS SHALL INCLUDE BUT NOT BE LIMITED TO:
   a. TOPPING UP WITH SOIL WHERE SUBSIDED.
   b. RE-SEEDING AS REQUIRED.
   c. MOWING AND GENERAL LANDSCAPE MAINTENANCE.
   d. ALL LINEMARKING TO BE IN ACCORDANCE WITH COUNCIL GUIDELINES.
6. REINSTATE ANY PATHS, KERBS, PAVEMENTS, BATTERS AND RETAINING WALLS DAMAGED DURING THE COURSE OF THE WORKS TO THE SATISFACTION OF THE CLIENT REPRESENTATIVE.

SITE MAINTENANCE

1. PROVIDE A DRAINAGE SYSTEM AS SOON AS THE FOOTINGS ARE CONSTRUCTED. IT MUST PREVENT PONDING AGAINST, NEAR OR BENEATH THE FOOTINGS IN ORDER TO MAINTAIN A STABLE MOISTURE CONTENT WITHIN THE FOUNDATION. GRADING THE SURFACES (1 IN 20 FOR AT LEAST 2.0 METRES) AWAY FROM FOOTINGS AND THEIR EXCAVATIONS TO COLLECTION POINTS WILL BE NECESSARY DURING CONSTRUCTION IN WET WEATHER.
2. PAVE OR GRADE THE FINISHED SURFACES AWAY FROM THE BUILDING AT SLOPES OF 1:40. THE ONGOING BUILDING MAINTENANCE SHOULD ENSURE THE EFFICIENT COLLECTION AND THE CHANNELING OF RUN-OFF AWAY FROM THE BUILDING. LEADING EDGES OF PAVING CAST AGAINST THE BUILDING AND PROVIDING AN INTERFACE BETWEEN LANDSCAPED AREAS AND THE BUILDING ARE RECOMMENDED TO HAVE CAST LIPS WHICH PENETRATE AT LEAST 400mm INTO THE SOIL AS A CUT OFF FOR UNDER PAVEMENT SEEPAGE.
3. PLUMBING TRENCHES SHOULD BE SLOPED AWAY FROM THE BUILDINGS. THE FIRST 1.5m OF TRENCH FROM THE BUILDING SHOULD BE BACKFILLED WITH TAMPED CLAY TO FORM A CUT-OFF AGAINST SEEPAGE VIA TRENCHES THAT LEAD UNDER THE BUILDING.
4. SUBSURFACE DRAINS NEAR FOOTINGS SHOULD BE AVOIDED. IF THEY ARE NECESSARY, THE TRENCHES MUST BE CAPABLE OF PROVIDING DRAINAGE IF BLOCKAGE OCCURS.
5. PLUMBING PROBLEMS THAT COULD CAUSE CHANGES TO FOUNDATION'S MOISTURE CONTENT SHOULD BE RECTIFIED IMMEDIATELY.
6. THE PLANTING OF TREES CLOSE TO THE BUILDING SHOULD BE AVOIDED. MINIMUM DISTANCE AWAY SHOULD BE EQUAL TO THREE QUARTERS OF THEIR MATURE HEIGHT.

PAVEMENT MARKINGS - ROADWAYS AND CAR PARKS:

1. UNLESS LONG LIFE MARKING ARE SPECIFIED, PAVEMENT MARKINGS WILL GENERALLY BE PAINTED AND RETRO-REFLECTORISED, MAKING USE OF WATER-BORNE PAINTS, AND DROP-ON E20 GLASS BEADS. IF LONG LIFE MARKING ARE SPECIFIED, THESE SHALL BE INSTALLED IN ACCORDANCE WITH AUSTROADS, STATE ROAD AUTHORITY AND MANUFACTURER GUIDE LINES.
2. UNLESS OTHERWISE APPROVED BY THE RELEVANT AUTHORITY, SOLVENT-BORNE CHLORINATED RUBBER PAINT MAY ONLY BE SUBSTITUTED FOR WATER-BORNE FOR INITIAL APPLICATIONS ON NEW SURFACES.
3. ALL PAINTS SHALL BE APPROVED UNDER THE AUSTRALIAN PAINT APPROVAL SCHEME (A.P.A.S.)
4. FOR INITIAL MARKINGS OF NEW SURFACINGS, PAINT SHALL COMPLY WITH THE REQUIREMENTS OF AS 4049.1 FOR SOLVENT-BORNE PAINT, OR AS/NZS 4049.3 FOR WATER-BORNE PAINT.
5. GLASS BEADS SHALL BE USED ON ALL MARKINGS AND SHALL CONFORM WITH THE REQUIREMENTS FOR DROP-ON BEADS AS DESCRIBED IN AS/NZS 2009, EXCEPT THAT E20 BEADS SHALL BE ADOPTED FOR USE WITH 0.3MM MINIMUM DRY FILM THICKNESS (DFT) LINEMARKING APPLICATIONS OF WATER-BORNE PAINT.
6. FOR AREAS UNDER COUNCIL, STATE OR SIMILAR ROAD AUTHORITY CONTROL, PAVEMENT MARKINGS WILL COMPLY WITH AUSTROADS GUIDES (GUIDE TO TRAFFIC MANAGEMENT), AS 1742 (MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES), AND RELEVANT SECTIONS OF AS 2890 (PARKING FACILITIES). LINES FOR CAR PARKING BAYS WILL GENERALLY BE 100MM (–10MM, +0MM) WIDE. THE COLOUR OF THE PAINT USED TO DELINEATE CAR PARKING BAYS SHALL BE AS SPECIFIED BY THE RELEVANT STATE ROAD AUTHORITY.
7. FOR PRIVATE AREAS NOT UNDER EITHER COUNCIL, STATE OR OTHER ROAD AUTHORITY CONTROL, PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH AS 1742 AND RELEVANT SECTIONS OF AS 2890. LINES FOR CAR PARKING BAYS WILL GENERALLY BE 90MM (–10MM, +10MM) WIDE. THE COLOUR OF THE PAINT USED TO DELINEATE CAR PARKING BAYS SHALL CONTRAST WITH THE PAVEMENT COLOUR, OR SHALL ACCORD WITH THE SPECIFICATIONS OF THE RELEVANT STATE ROAD AUTHORITY.
8. NEW MARKINGS SHALL RECEIVE TWO APPLICATIONS OF PAINT, EACH APPLICATION TO PROVIDE A DRY FILM THICKNESS OF AT LEAST 0.3MM MINIMUM. THE SECOND APPLICATION SHALL BE APPLIED BETWEEN FOUR (4) AND EIGHT (8) WEEKS AFTER THE INITIAL APPLICATION. EACH APPLICATION OF PAINT SHALL ALSO INVOLVE THE APPLICATION OF GLASS BEADS.
9. GLASS BEADS SHALL BE APPLIED TO THE FRESHLY LAID PAINT TO PRODUCE A UNIFORM PROPERLY BONDED COVERAGE OVER THE WHOLE PAINTED SURFACE.
10. COMPLETED MARKINGS SHALL BE UNIFORM IN APPEARANCE FROM ALL ANGLES OF OBSERVATION, TEXTURE, WIDTH AND THICKNESS AND THE SURFACE SHALL BE FREE FROM STREAKS, OVERLAPS, UN-BEADED AREAS, TYRE MARKS AND OTHER DEFECTS. EDGES AND CUT-OFFS SHOULD BE NEAT AND SHARP, AND THERE SHALL BE NO VISIBLE RUN-OFF, OVERSPRAY, DRIBBLES, SPLASH OR SPILLAGE ONTO THE SURROUNDING AREA, OR ONTO PARKED OR PASSING VEHICLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REMOVAL OF PAINTS FROM SUCH VEHICLES.
11. AS REQUIRED, THE RETRO-REFLECTIVITY OF INSTALLED PAVEMENT MARKINGS MAY BE ASSESSED IN ACCORDANCE WITH AUSTROADS AND/OR STATE ROAD AUTHORITY GUIDELINES. PAVEMENT MARKINGS THAT FAIL TO SATISFY RETRO-REFLECTIVITY REQUIREMENTS WITHIN THE CONTRACTOR'S MAINTENANCE PERIOD SHALL BE RE-DONE AT NO EXTRA COST.

SEDIMENT AND EROSION CONTROL

GENERAL NOTES

1. SOIL CONTROL MEASURES MUST BE ADOPTED AT ALL TIMES TO THE SATISFACTION OF COUNCILS DESIGN ENGINEER AND THE FACILITIES MANAGER DURING THE DURATION OF THE CONTRACT. SITE CONTROLS AND EROSION MINIMISATION TECHNIQUES ARE TO BE IN ACCORDANCE WITH THE INSTITUTE OF ENGINEERS AUSTRALIA PUBLICATION 'SOIL EROSION AND SEDIMENT CONTROL', EPA GUIDELINES AND OTHER CONTRACT DOCUMENTATION INCLUDING THIS PLAN.
2. SITE ESTABLISHMENT AND STRIPPING TOPSOIL:
   a. STOCKPILE SOIL IN ALLOCATED LOCATION AND PROVIDE SILT CONTROL BARRIERS IF STOCKPILE IS LEFT OVERNIGHT.
   b. WASH DOWN ANY VEHICLES LEAVING SITE AFTER TREADING ON SOIL.
   c. PLACE CRUSHED ROCK TO A DEPTH OF 150mm MINIMUM TO ALL VEHICLE ACCESS AREAS OVER AN APPROVED WOVEN GEOTEXTILE FABRIC (DUX W155 OR EQUIVALENT).
   d. GRADE ALL SOIL AREAS AWAY FROM MAIN CONSTRUCTION AREA AND TOWARDS DRAINAGE POINTS.
   e. PLACE FILTER MATERIAL SUCH AS HAY BALES OR SILT FENCES AROUND DRAINAGE POINTS.
   f. INSTALL ON-SITE WASTE RECEPTORS (e.g. MINI-SKIPS, BINS, WIND PROOF LITTER RECEPTORS).
3. CONSTRUCTION OF DRAINAGE SYSTEM:
   a. CARRY OUT WORKS IN DRY WEATHER.
   b. DO NOT LEAVE TRENCHES OPEN FOR A LONG PERIOD OF TIME.
   c. BUILD DRAINAGE SYSTEM COMMENCING FROM DOWN STREAM.
   d. PLACE FILTER MATERIAL IN EXISTING PIT DOWN STREAM, UNTIL ALL DRAINAGE IS IN PLACE AND THEN INSTALL SILT CONTROL DEVICES AT EACH NEW PIT.
4. CONSTRUCTION OF MAIN WORKS:
   a. ENSURE THAT SOIL IS KEPT MOIST TO MINIMISE AIR POLLUTION.
   b. DO NOT LEAVE SOIL EXPOSED FOR LONG PERIODS OF TIME.
   c. ENSURE FALLS OF CUT OR FILL ARE AWAY FROM MAIN WORKING AREA.
   d. INSTALL ROOF DOWNPIPES AS SOON AS PRACTICABLE - IF NECESSARY USE TEMPORARY CONNECTIONS TO ENSURE STORMWATER DOES NOT DISCHARGE OVER LOOSE SOIL.
5. LANDSCAPING:
   a. PLACE VEGETATION SUITABLE TO MINIMISE LOOSE SOIL CONDITIONS. REFER TO THE APPROVED LANDSCAPING PLAN FOR ADDITIONAL INFORMATION.

TREATMENT DEVICES

1. SEDIMENT FENCES; SEDIMENT FENCES ARE TO BE PLACED AS REQUIRED. THEY CONSIST OF GEOTEXTILE FILTER FABRIC STAPLED ONTO 40mm SQUARE HARDWOOD STAKES OR WIRE TIED TO STEEL POSTS. THE FILTER FABRIC MUST BE BURIED 100mm MIN INTO THE GROUND AND STAND UP TO A HEIGHT OF 700mm. POSTS ARE TO BE SPACED AT 2.0m CENTRES AND DRIVEN 600mm INTO THE GROUND. WHEN STOCKPILING GRANULAR MATERIALS INCLUDING TOP SOILS, A SEDIMENT FENCE SHOULD BE ERECTED AT THE PERIMETER OF THE STOCKPILE IF LEFT OVERNIGHT.
2. PROTECTION OF DRAINAGE POINTS; ALL DRAINAGE POINTS, WHETHER TEMPORARY OR PERMANENT, SHALL BE PROTECTED FROM POLLUTED WATERS. THE PRINCIPAL CONTRACTOR MAY USE STRAW BALES HELD IN PLACE BY AT LEAST TWO DRIVEN PICKETS OR SEDIMENT FENCES TO FULLY SURROUND THE DRAINAGE POINT.
3. GENERAL BUILDING OPERATIONS; BUILDING OPERATIONS SUCH AS WASHING OF TOOLS AND PAINTING EQUIPMENT, CUTTING MASONRY OR THE USE OF ANY OTHER WATER COOLED CUTTING EQUIPMENT SHOULD BE CARRIED OUT IN A CONTROLLED AREA, WHERE POSSIBLE ON A NATURAL FILTERED AREA SUCH AS A GRASSED TRENCH, OR IN THE VICINITY OF A SEDIMENT SETTLING TANK.
4. ALL VEHICLE ENTRY/EXIT POINTS ARE TO BE TREATED WITH CRUSHED ROCK OVER AN APPROVED WOVEN GEOTEXTILE FABRIC (DUX W155 OR EQUIVALENT), WELL COMPACTED AND ADJACENT TO THE EXIT DRIVE THE PRINCIPAL CONTRACTOR IS TO PROVIDE SUITABLE WASHING FACILITIES FOR CLEANING OF ALL VEHICLES PRIOR TO THEM EXITING THE