





GENERAL SPECIFICATIONS

TREE PROTECTION SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF WORKS AROUND EXISTING TREES TO BE RETAINED IN ACCORDANCE WITH ARBORICULTURAL IMPACT ASSESSMENT REPORT BY URBAN FORESTRY AUSTRALIA, CONSENT CONDITIONS AND STANDARD INDUSTRY PRACTICES. IN GENERAL, TREE PROTECTION SHALL CONSIST OF 1800mm HIGH CHAIN WIRE FENCING SUPPORTED BY STEEL POSTS. TRUNK PROTECTION SHALL BE APPLIED TO STREET TREES WHERE APPLICABLE.

CARE SHALL BE TAKEN WHEN REMOVING COUNCIL APPROVED TREES AND PLANTING WITHIN TPZ'S SO AS NOT TO DAMAGE ROOTS OR CANOPIES OF TREES TO BE RETAINED.

CARE SHALL BE TAKEN DURING ENTIRE PERIOD OF WORKS TO ENSURE NO DAMAGE TO ROOTS OR CANOPIES OF TREES TO BE RETAINED. NO STORING OF BUILDING MATERIALS OR VEHICLES, WASHING OF EQUIPMENT, DISPOSAL OF CHEMICALS, ETC. SHALL BE PERMITTED WITHIN TPZ's. NO EXCAVCATION OR TRENCHING SHOULD OCCUR BENEATH CANOPIES EXCEPT FOR COUNCIL APPROVED WORKS. ALL EXCAVATION BENEATH TREE CANOPIES SHALL BE UNDERTAKEN BY HAND OR TO COUNCIL / PROJECT ARBORIST INSTRUCTIONS. SHOULD HEAVY MACHINERY BE REQUIRED TO PASS WITHIN TREE PROTECTION ZONES APPROPRIATE TREE PROTECTION

LANDSCAPE HARDWORKS

DEMOLITION, BULK EARTHWORKS, MASONRY RETAINING WALLS, SANDSTONE WALLS, STONE EDGING, PLANTER BOXES, TILED TERRACES, STEPS, IN SITU CONCRETE, DRAINAGE, WATERPROOFING, FENCING, EXTERNAL LIGHTING, TREE REMOVAL AND ALL SITE CONSTRUCTION INDICATED SHALL BE EXECUTED IN ACCORDANCE WITH ARCHITECTURAL + ENGINEERING SPECIFICATIONS

LANDSCAPE WORKS SHALL GENERALLY BE UNDERTAKEN IN ACCORDANCE WITH COUNCIL APPROVED PLANS AND SHALL BE COMPLIANT WITH: AS4970-2009 Protection of trees on development sites

AS 4970-2009/Amdt 1-2010 Protection of trees on development sites AS4373-2007 Pruning of amenity trees

MEASURES SHALL BE APPLIED TO ROOT AND CANOPY AREA.

AS4419-2003 Soils for landscaping and garden use AS4454-2012 Composts, soil conditioners and mulches AS3743-2003 Potting mixes

AS2303-2018 Tree stock for landscape use ALL LANDSCAPE WORKS SHALL BE EXECUTED BY A COMPETENT LANDSCAPE CONTRACTOR EXPERIENCED IN HORTICULTURAL PRACTICE AND LANDSCAPE CONSTRUCTION. THE CONTRACTOR SHALL HOLD A CURRENT NSW STRUCTURAL LANDSCAPE

IRRIGATION WORKS SHALL BE EXECUTED BY A CONTRACTOR SUITABLY QUALIFIED AND LICENSED BY NSW DEPARTMENT OF FAIR TRADING FOR URBAN IRRIGATION.

SOIL PREPARATION + PLANTING SOILS

PLANTING BEDS SHALL BE PREPARED GENERALLY IN ACCORDANCE WITH DETAILS THE FOLLOWING SPECIFICATIONS APPLY GENERALLY TO DISTURBED AREAS OF THE SITE WHERE EXCAVATION FOR CONSTRUCTION REQUIRES REINSTATEMENT OF LEVELS USING IMPORTED SOILS:

STANDARD TOPSOIL:

SANDY LOAM TO CLAY LOAM MIX DESIGNED FOR GENERAL PURPOSE ON-GRADE GARDEN BED PLANTING WITH A HIGH NUTRIENT REQUIREMENT FOR SUSTAINED OPTIMUM GROWTH. USE 'LOW P' OPTIONS FOR NATIVE PLANTS **EXAMPLE COMPONENTS:**

SANDY LOAM SOIL 70-90% BY VOLUME

COMPOSTED SOIL CONDITIONER 10-30% FOR NATIVES COMPOSTED SOIL CONDITIONER 30-60% FOR EXOTIC SPECIES

LOAM TO SANDY LOAM, WELL DRAINED MEDIUM WITH LOW ORGANIC MATTER FOR BACKFILLING AT DEPTH. WELL BALANCED CHEMICALLY, NOT SALINE OR SODIC OR EXCESSIVELY ACIDIC OR CALCIUM DEFICIENT AND NOT DISPERSIVE. USE LOW 'P'

THE MIX MAY USE A SMALL PROPORTION OF SITE TOPSOIL OR SUBSOIL, PROVIDED THE ORGANIC MATTER UPPER LIMIT IS NOT EXCEEDED.

EXAMPLE COMPONENTS: SANDY LOAM SOIL

60-80% BY VOLUME CLAY LOAM 20-30% BY VOLUME COMPOSTED SOIL CONDITIONER <10% BY VOLUME

ON-SLAB TOPSOIL INCLUDING PLANTER BOXES

OPEN GRANULAR WELL-DRAINED GROWING MEDIA WITH SATURATED DENSITY OF LESS THAN 2400 KG/M3 FOR USE IN THE TOP 300mm OF ALL ON-SLAB INSTALLATIONS. GENERALLY, SOIL SHALL BE FREE OF 'UNWANTED MATERIAL' WITH PHYSICAL PROPERTIES OF POTTING MIX ASSESSED BY AS 3743.

EXAMPLE COMPONENTS: SANDY LOAM SOIL OR SITE TOPSOIL 20-40% BY VOLUME

HORTICULTURAL ASH, PERLITE, OR SIMILAR LOW-DENSITEY MINERAL MATTER 30-60% BY VOLUME

COMPOSTED SOIL CONDITIONER 20-30% BY VOLUME ON-SLAB SUBSOIL INCLUDING PLANTER BOXES

OPEN GRANULAR WELL-DRAINED GROWING MEDIA WITH ALL-UP SATURATED DENSITY OF LESS THAN 2400K G/M3 FOR USE AT DEPTH IN ALL ON-SLAB INSTALLATIONS GENERALLY THE SOIL MUST BE FREE OF 'UNWANTED MATERIAL' AND MUST COMPLY WITH AS 3743.

EXAMPLE COMPONENTS: SANDY LOAM SOIL OR SITE TOPSOIL 10-30% BY VOLUME

HORTICULTURAL ASH, PERLITE, OR SIMILAR LOW-DENSITEY MINERAL MATTER 30-50% BY VOLUME

COMPOSTED 10mm PINE BARK 20-40% BY VOLUME COMPOSTED SOIL CONDITIONER

IMPROVED SITE SOILS

FOR PLANTING BEDS WHERE EXISTING SITE SOIL HAS BEEN RETAINED AT OR NEAR FINISHED LEVELS IMPROVED SITE SOIL SHALL BE USED FOR PLANTING. SITE SOIL TO A DEPTH OF 300mm SHALL BE AMENDED USING 10% 'GREENLIFE MULCH' CULTIVATED INTO SITE SOIL.

DO NOT INTRODUCE ORGANIC MATTER LOWER THAN 400mm, BACKFILL AT DEPTH WITH SUBSOIL ONLY.

CONTRACTOR SHALL UNDERTAKE pH TESTS AND ADJUST WHERE NECESSARY TO ACHIEVE A pH WITHIN THE 5.5 - 7.5 RANGE. MIX IN GYPSUM AT MANUFACTURER'S RECOMMENDED RATES IF CLAY SOIL ENCOUNTERED. MASONRY PLANTER BOXES

WHERE INDICATED, ON-SLAB MASONRY PLANTERS SHALL BE CONSTRUCTED AND SHALL PROVIDE FOR ADEQUATE SOIL DEPTH FOR PLANTING, IN GENERAL, PROVIDE MINIMUM OF 800mm DEPTH FOR SHRUBS AND 600mm DEPTH FOR GROUNDCOVERS. PLANTERS SHALL BE CONSTRUCTED. DRAINED, WATERPROOFED AND CERTIFIED IN ACCORDANCE WITH ENGINEER'S SPECIFICATIONS TO FUTURE DETAILED DESIGN.

GARDEN EDGING

EDGE JUNCTION OF ALL LAWN AND GARDEN AREAS ON SITE WITH LOW SANDSTONE EDGE LAID ON MORTAR BED. EDGE SHALL FINISH APPROXIMATELY 100mm ABOVE ADJOINING LAWN UNLESS OTHERWISE INDICATED.

ALL PLANTS SHALL BE WELL GROWN AND DISEASE FREE. PLANTING SHALL BE IN ACCORDANCE WITH PLANTING SCHEDULE. TREES SHALL BE GROWN TO AS2303:2018 OR NATSPEC.

GENERAL PLANT MATERIAL (EXOTICS AND ENDEMIC)

SUPPLY PLANTS IN ACCORDANCE WITH PLANTING SCHEDULE. NO SUBSTITUTIONS ARE PERMITTED WITHOUT THE CONSENT OF THE SUPERVISING LANDSCAPE ARCHITECT. TREES SHALL BE GROWN TO NATSPEC AND SHALL BE VIGOROUS, WELL ESTABLISHED, FREE OF DISEASE AND PESTS, HARDENED OFF, TRUE TO FORM, AND GROWN IN THEIR FINAL CONTAINERS FOR NOT LESS THAN 12 WEEKS. TREES SHALL HAVE A SINGLE LEADING SHOOT AND POTS FREE FROM WEEDS. ENSURE ANY STAKING OR GUYING REQUIRED IS REMOVED WITHIN 12 MONTHS.

AT PLANTING SPREAD SLOW RELEASE FERTILZER AROUND DRIP LINE OF ALL PLANTS AT MANUFACTURER'S RECOMMENDED

GENERAL APPLICATION:

EQUAL TO OSMOCOTE PLUS TRACE ELEMENTS - ALL PURPOSE NPK 19.4 : 1.6 : 6 NATIVE PLANTS: EQUAL TO OSMOCOTE PLUS TRACE ELEMENTS - NATIVE GARDENS NPK 17.9: 0.8: 7.3

WEED ERADICATION

ALL WEED SPECIES SHALL BE REMOVED FROM SITE IN ACCORDANCE WITH BIOSECURITY ACT 2015 USING NON - CHEMICAL PRACTICES WHEREVER POSSIBLE. ALL VEGETATIVE WEED MATERIAL SHALL BE SUITABLY DISPOSED OFF SITE AND FOLLOW UP REMOVAL OR RE-EMERGING WEED MATERIAL SHALL BE UNDERTAKEN ON AN 'AS NEEDED ' BASIS.

EXCEPT WHERE INDICATED TO USE GRAVEL MULCH, COVER PLANTING AREAS OF SITE WITH 75mm 'FOREST FINES' MULCH. ENSURE ALL MULCH IS FREE OF WEED SEED AND VEGETATIVE MATERIAL. KEEP CLEAR FROM PLANT STEM COLLARS.

TO ARCHITECT'S SPECIFICATIONS

GRAVEL MULCH

MATERIAL: 70mm DEEP WESTERN PEACH GRAVEL 10mm SUPPLIER: LOWER MOUNTAINS LANDSCAPE SUPPLIES

GRAVEL MULCH SHALL BE INSTALLED WITH MIN. 1% FALL IN SUB-GRADE TO STORMWATER. INSTALL LAYER OF GEO-FABRIC BETWEEN PREPARED BASE AND GRAVEL MULCH LAYER.

TURF SHALL BE 'SIR WALTER' BUFFALO. TURF ROLLS SHALL BE A MINIMUM OF 25mm THICK SUPPLIED FROM A SPECIALIST GROWER OF CULTIVATED TURF. IT SHALL BE OF EVEN THICKNESS, FREE FROM WEEDS. TURF SHALL BE DELIVERED WITHIN 24HRS OF CUTTING AND LAID WITHIN 24 HRS OF DELIVERY. CONTRACTOR SHALL LAY CLOSE BUTTED IN STRETCHER PATTERN WITH STAGGERED JOINTS TO FINISH FLUSH WITH ADJOINING SURFACES AFTER TAMPING.

LAY ON MINIMUM 150mm COMMERCIAL QUALITY SANDY LOAM TURF UNDERLAY. EXAMPLE COMPENENTS:

MEDIUM COARSE GRAIN WASHED SAND 30-50% BY VOLUME SANDY LOAM SOIL OR SITE SOIL

40-60% BY VOLUME COMPOSTED SOIL CONDITIONER 10% BY VOLUME

LIGHTLY TAMP TO AN EVEN SURFACE IMMEDIATELY AFTER LAYING. DO NOT USE ROLLER. ENSURE ROLLS ARE NOT ALLOWED TO DRY OUT AND WATER IMMEDIATELY AFTER LAYING AS NECESSARY TO ENSURE TOPSOIL IS KEPT MOIST TO 100mm DEPTH. PROTECT NEWLY LAID TURF FROM PEDESTRIAN AND VEHICULAR TRAFFIC UNTIL ESTABLISHED. FERTILISE WITHIN 2 WEEKS OF LAYING WITH AN APPROVED LAWN FERTILISER APPLIED TO

MANUFACTURER'SRECOMMENDATIONS. APPLYADDITIONALFERTILISERASREQUIREDTOMAINTAIN HEALTHY GROWTH. ONCE ESTABLISHED, MOW TO MAINTAIN GRASS HEIGHT BETWEEN 30-50mm. CARE SHALL BE TAKEN WHEN WORKING WITH ROAD RESERVE AREAS TO REDUCE PUBLIC DISTURBANCE AND TO MAINTAIN SAFE PEDESTRIAN PASSAGE.

FENCES NEW FRONT FENCE / COURTYARD FENCES WHERE INDICATED SHALL BE METAL PALLISADE CONSTRUCTED TO ARCHITECT'S SPECIFICATIONS.

SIDE BOUNDARY FENCES SHALL BE RETAINED AS EXISTING.

STONE / FEATURE WALLS and RETAINING WALLS
GENERALLY, STONE / FEATURE WALLS AND MASONRY GARDEN RETAINING WALLS SHALL BE CONSTRUCTED TO ARCHITECT'S PLANS AND STRUCTURAL ENGINEER'S SPECIFICATIONS.

IRRIGATION

A WATER BOARD APPROVED, FULLY AUTOMATIC SYSTEM SHALL BE INSTALLED AS FOLLOWS:

-DRIP IRRIGATION SYSTEM TO ALL PLANTING BEDS + PLANTER BOXES WATER SOURCE SHALL BE SUPPLIED BY BUILDER. IN GENERAL, SYSTEM SHALL CONSIST OF TORO 'DRIP-EZE' PIPES AND EMITTERS (OR EQUIVALENT). REFER TO FUTURE ARCHITECTURAL SERVICES PLANS FOR LOCATIONS OF WATER SOURCE,

SYSTEM SHALL INCLUDE ALL FILTERS, BENDS, JUNCTION, ENDS AND OTHER ANCILLARY EQUIPMENT.

A WIRELESS RAIN SENSOR, AUTOMATIC SHUT DOWN DEVICE, BACK FLOW PREVENTION AND A MANUAL OVERRIDE PROGRAMME SHALL BE PROVIDED. WATERING STATIONS SHALL BE INSTALLED TO ALLOW FOR HIGH AND LOW WATER REQUIREMENT AREAS TO SYSTEM SHALL BE AUTOMATICALLY CONTROLLED BY RAINBIRD COMPUTER (OR EQUIVALENT) LOCATED IN PLANT ROOM IN BASEMENT CARPARK.

GENERAL POWER OUTLETS, WALL PENETRATIONS AND ACCESS CONDUITS SHALL BE SUPPLIED BY BUILDER. CONTRACTOR SHALL LIAISE WITH BUILDER, HYDRAULIC ENGINEER AND COUNCIL AS NECESSARY. ALL WORKS SHALL BE CARRIED OUT UNDER THE SUPERVISION OF PERSONS SUITABLY QUALIFIED AND LICENSED FOR URBAN IRRIGATION. CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS TO SYDNEY WATER REQUIREMENTS AND PROVIDE A 12 MONTH AFTER INSTALLATION, SYSTEM SHALL BE TESTED AND ADJUSTED AND ACCEPTANCE SHALL BE SUBJECT TO SATISFACTORY

MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE WORKS, INCLUDING REPLACEMENT OF DEAD OR DAMAGED PLANT MATERIAL, WEED AND PEST CONTROL, PEST CONTROL, FERTILIZING, AND WATERING UNTIL HANDOVER OF THE WORKS

LAWNS SHALL BE MOWN AT 14 DAY INTERVALS, TRIMMING EDGE, REPAIRING AND REPLACING FAILED TURF OR BARE PATCHES UNTIL HANDOVER OF THE WORKS.

TESTING. CONTRACTOR SHALL HANDOVER THE SYSTEM WITH CLEAR INSTRUCTIONS AS TO ITS OPERATION.

IRRIGATION SYSTEM SHALL BE TESTED. ADJUSTED AND REPAIRED. STAKES (IF REQUIRED) SHALL BE MAINTAINED / MADE GOOD



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