

GEORGES RIVER GRAMMAR PRIMARY SCHOOL

3A-5 HAIG AVENUE, GEORGES HALL NSW 2198

LANDSCAPE DA DOCUMENTATION

SITE CONTEXT PLAN



DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME	SCALE / SIZE	REVISION
LDA-01	COVER SHEET	N/A	C
LDA-02	LANDSCAPE MASTERPLAN	1:500 / A3	C
LDA-03	LANDSCAPE PLAN - GROUND FLOOR	1:250 / A3	C
LDA-04	PLANTING PLAN - CARPARK	1:250 / A3	C
LDA-05	PLANTING PLAN - GROUND FLOOR	1:250 / A3	C
LDA-06	LANDSCAPE PLAN - LEVEL 1	1:250 / A3	C
LDA-07	LANDSCAPE DETAILS	N/A	C

PREPARED FOR
ICR DESIGN

PREPARED BY

GROUND iNK

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SUBMISSION FOR

LANDSCAPE DA DOCUMENTATION

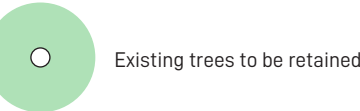


Legend

- 1. Circular sandstone seating area.
- 2. Existing canopy tree to be retained and protected providing natural shaded seating opportunities.
- 3. Synthetic turf play space with shade sails and soft-fall rubber embankments with play opportunities.
- 4. Slides taking advantage of level change.
- 5. New tree planting providing shaded seating opportunities.
- 6. Bleacher steps providing amphitheatre and connection between upper and lower play areas.
- 7. Sandstone seating blocks around open turf area.
- 8. Proposed sandpit with shade sail over.
- 9. Bin store.
- 10. New landscape screen planting around perimeter fence with potential for new trees, screening shrubs and understorey planting.
- 11. Proposed new feature tree.
- 12. Proposed new garden bed with integrated seating wall edge.
- 13. Proposed fence line.

EX 00.00 Existing spot level

RL 00.00 Proposed spot level

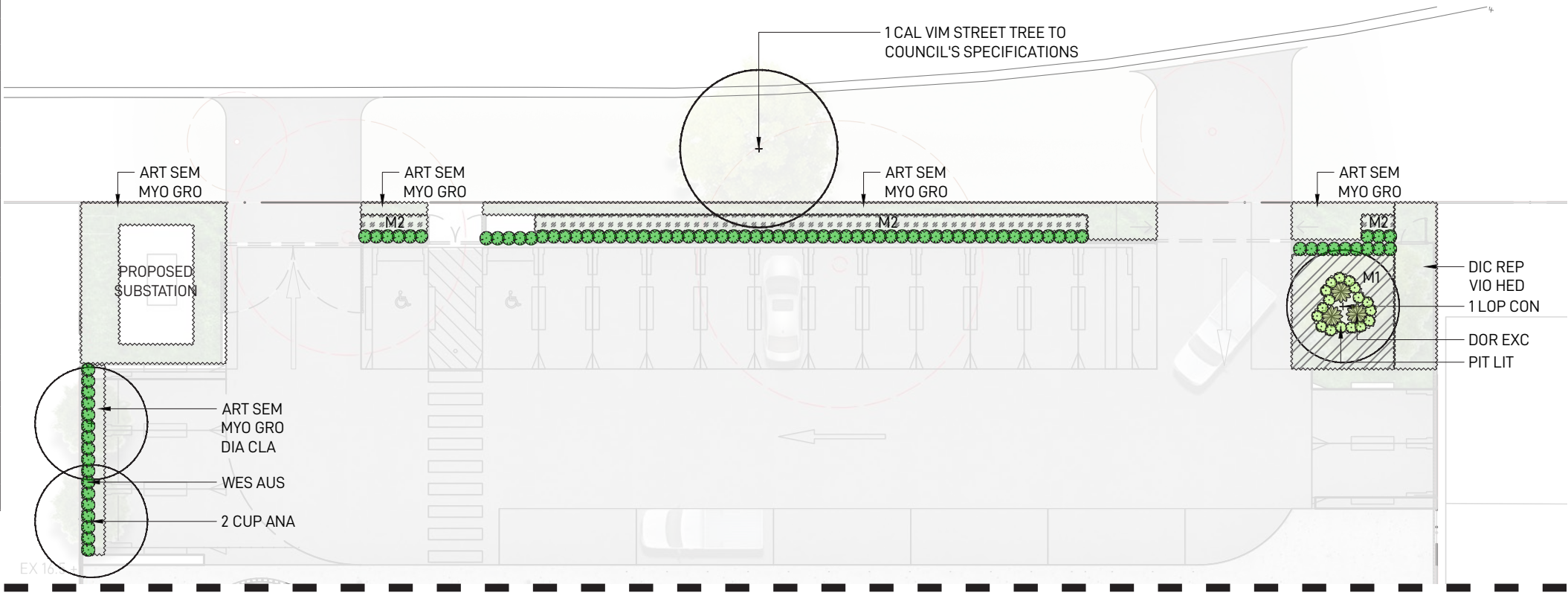


Plant Schedule

CODE	BOTANICAL NAME	COMMON NAME	HEIGHT	NATIVE	POT SIZE
TREES					
CAL VIM	CALLISTEMON VIMINALIS	BOTTLEBRUSH	8M	✓	100L
CUP ANA	CUPANIOPSIS ANACARDIoidES	TUCKEROO	8-10M	✓	100L
LOP CON	LOPHOSTEMON CONFERTUS	BRUSH BOX	12M	✓	200L
SHRUBS					
DOR EXC	DORYANTHES EXCELSA	GYMEA LILY	1-2M	✓	300MM
NAN OBS	NANDINA 'OBSESSION'	SACRED BAMBOO	0.7M		200MM
PIT LIT	PITTOSPORUM 'LITTLE GEM'	KOHUHU	0.9M	✓	200MM
WES AUS	WESTRINGIA 'AUSSIE BOX'	ROSEMARY	1M	✓	200MM
GRASSES & GROUNDCOVERS					
ART SEM	ATRIPLEX SEMIBACCATA	CREEPING SALTBUSh	0.4M	✓	140MM
DIA CLA	DIANELLA 'CLARITY BLUE'	BLUE FLAX LILY	0.6M	✓	140MM
DIC REP	DICHONDRA REPENS	KIDNEY WEED	0.3M	✓	140MM
LOM TAN	LOMANDRA 'TANIKA'	MAT RUSH	0.5M	✓	140MM
MYO GRO	MYOPORUM 'GROUND HUG'	CREEPING MYOPORUM	0.3M	✓	140MM
PEN PEN	PENNISETUM 'PENNSTRIPe'	FOUNTAIN GRASS	0.4M	✓	140MM
POA ESK	POA 'ESKDALE BLUE'	TUSsock GRASS	0.4M	✓	140MM
WES LOW	WESTRINGIA 'LOW HORIZON'	COASTAL ROSEMARY	0.3M	✓	140MM
VIO HED	VIOLA HEDERACEA	NATIVE VIOLET	0.3M	✓	140MM

M1 MIX UNDERSTOREY PLANTING CONSISTING OF:
ART SEM, POA ESK, PEN PEN, MYO GRO, WES LOW

M2 MIX UNDERSTOREY PLANTING CONSISTING OF:
LOM TAN, PEN PEN, WES LOW



Refer to LDA-05 for Planting Plan - Ground Floor

Plant Schedule

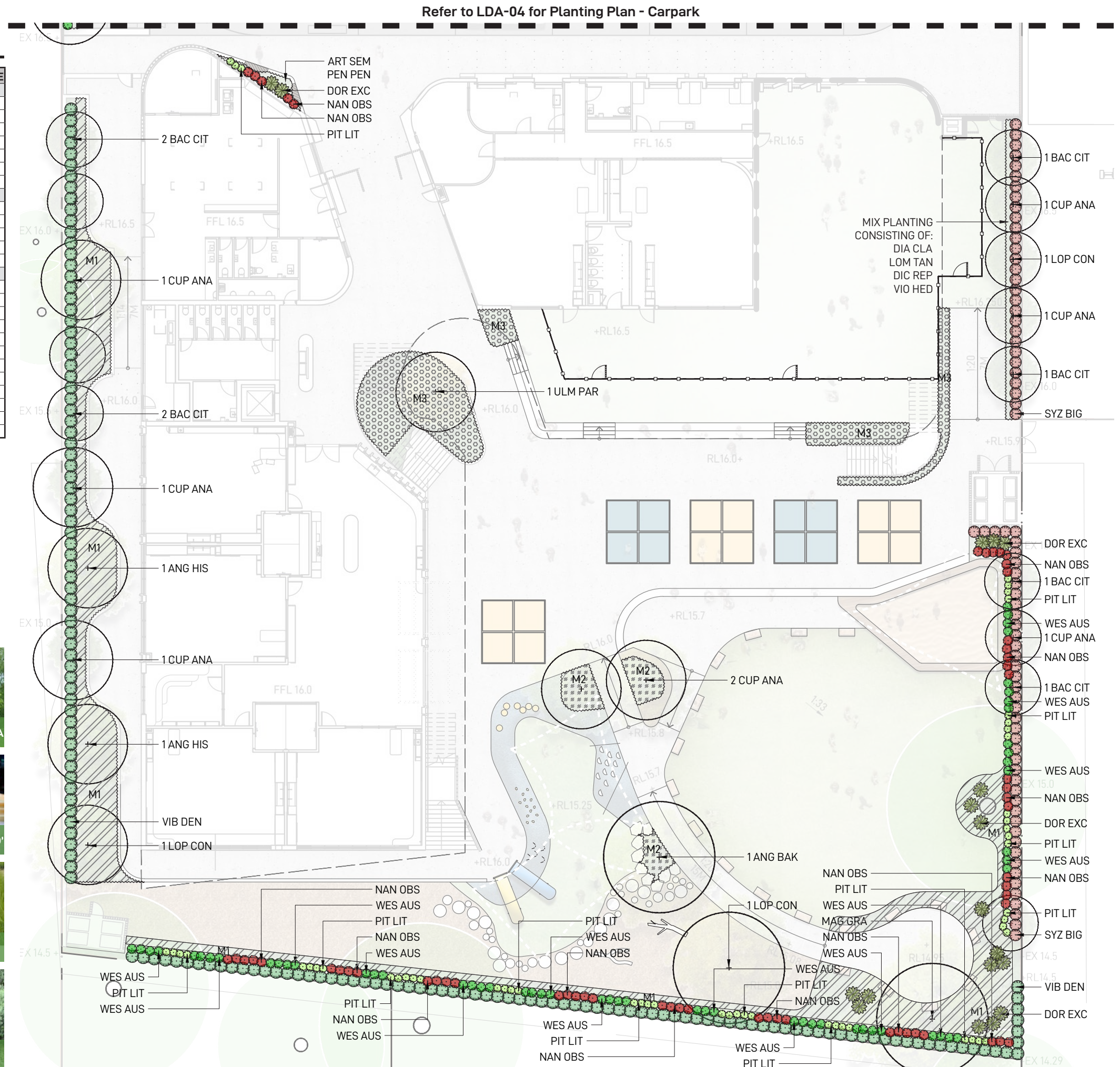
CODE	BOTANICAL NAME	COMMON NAME	HEIGHT	NATIVE	POT SIZE
TREES					
ANG BAK	ANGOPHORA BAKERI	NARROW APPLE	10M	✓	200L
ANG HIS	ANGOPHORA HISPIDA	DWARF APPLE	8M	✓	200L
BAC CIT	BACKHOUSIA CITRIODORA	LEMON MYRTLE	5M	✓	100L
CUP ANA	CUPANIOPSIS ANACARDIODES	TUCKEROO	8-10M	✓	100L
LOP CON	LOPHOSTEMIS CONFERTUS	BRUSH BOX	12M	✓	200L
MAG GRA	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	10M		200L
ULM PAR	ULMUS PARVIFOLIA	CHINESE ELM	8-10M		100L
SHRUBS					
DOR EXC	DORYANTHES EXCELSA	GYMEA LILY	1-2M	✓	300MM
NAN OBS	NANDINA 'OBSESSION'	SACRED BAMBOO	0.7M		200MM
PIT LIT	PITTSOPORUM 'LITTLE GEM'	KOHUHU	0.9M	✓	200MM
SYZ BIG	SYZYGIUM 'BIG RED'	LILLY PILLY	3M	✓	300MM
WES AUS	WESTRINGIA 'AUSSIE BOX'	ROSEMARY	1M	✓	200MM
GRASSES & GROUNDCOVERS					
ART SEM	ATRIPLEX SEMIBACCATA	CREEPING SALTBUSH	0.4M	✓	140MM
ASP NID	ASPLENIUM NIDUS	BIRDS NEST FERN	1M	✓	200MM
DIA CLA	DIANELLA 'CLARITY BLUE'	BLUE FLAX LILY	0.6M	✓	140MM
DIC REP	DICHONDRA REPENS	KIDNEY WEED	0.3M	✓	140MM
LIR SIL	LIRIOPE 'SILVERLAWN'	LILY TURF	0.3M		140MM
LOM TAN	LOMANDRA 'TANIKA'	MAT RUSH	0.5M	✓	140MM
MYO GRO	MYOPORUM 'GROUND HUG'	CREEPING MYOPORUM	0.3M	✓	140MM
PEN PEN	PENNISSETUM 'PENNSTRIPE'	FOUNTAIN GRASS	0.4M	✓	140MM
PHI LIT	PHILODENDRON 'LITTLE PHIL'	PHILODENDRON	0.4M		140MM
POA ESK	POA 'ESKDALE BLUE'	TUSsock GRASS	0.4M	✓	140MM
WES LOW	WESTRINGIA 'LOW HORIZON'	COASTAL ROSEMARY	0.3M	✓	140MM
VIO HED	VIOLA HEDERACEA	NATIVE VIOLET	0.3M	✓	140MM

M1

MIX UNDERSTOREY PLANTING CONSISTING OF:
ART SEM, POA ESK, PEN PEN, MYO GRO, WES LOW

M2 MIX UNDERSTOREY PLANTING CONSISTING OF:
LOM TAN, PEN PEN, WES LOW

M3 MIX SHADE TOLERANT UNDERSTOREY PLANTING
CONSISTING OF:
ASP NID, DIC REP, LIR SIL, VIO HED, PHI LIT

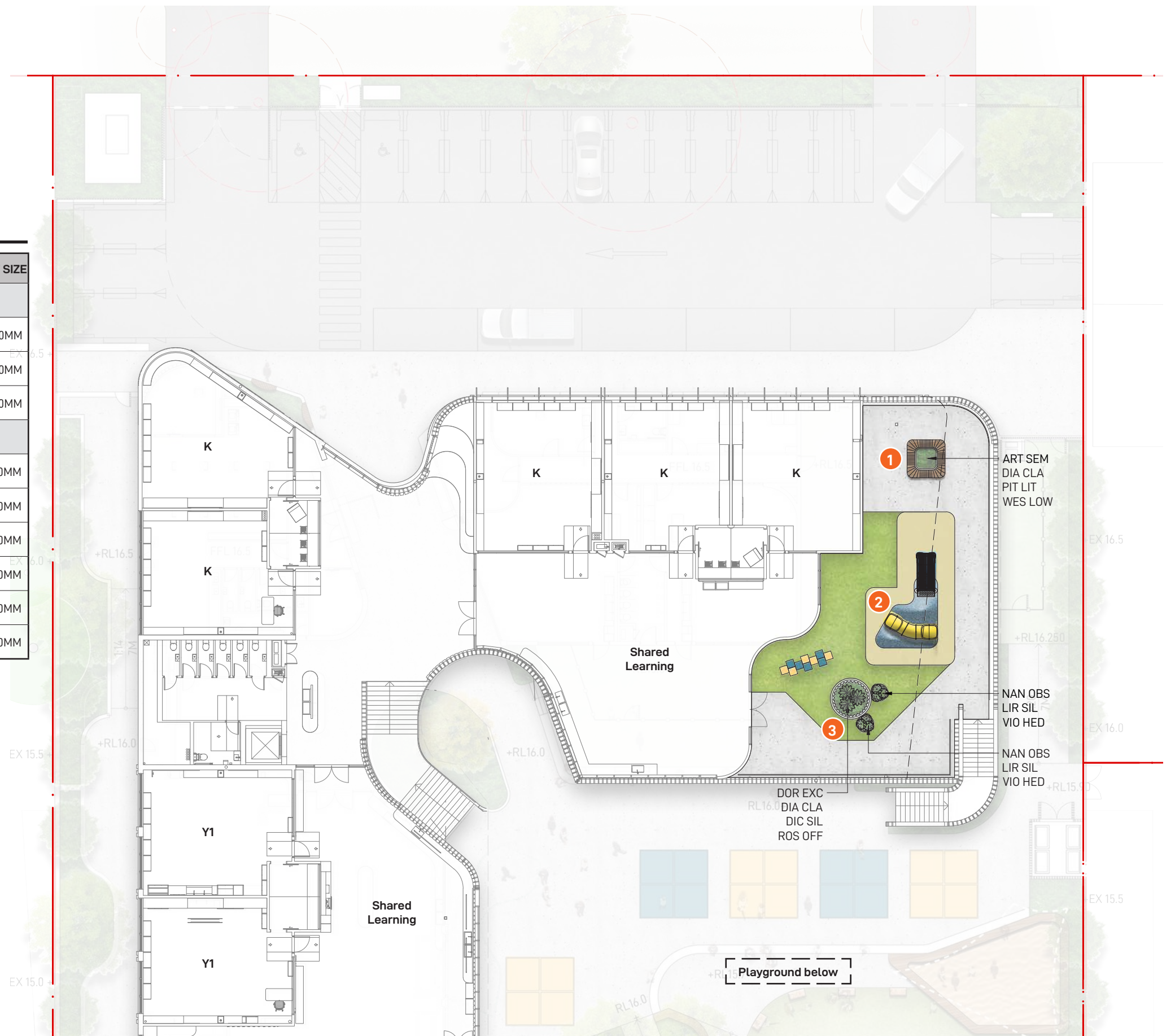


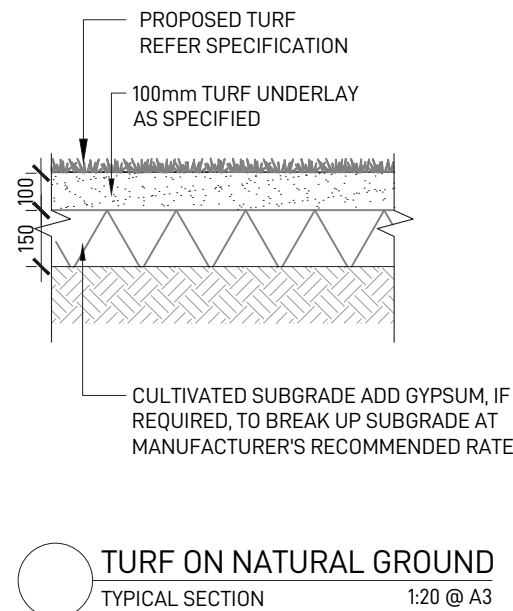
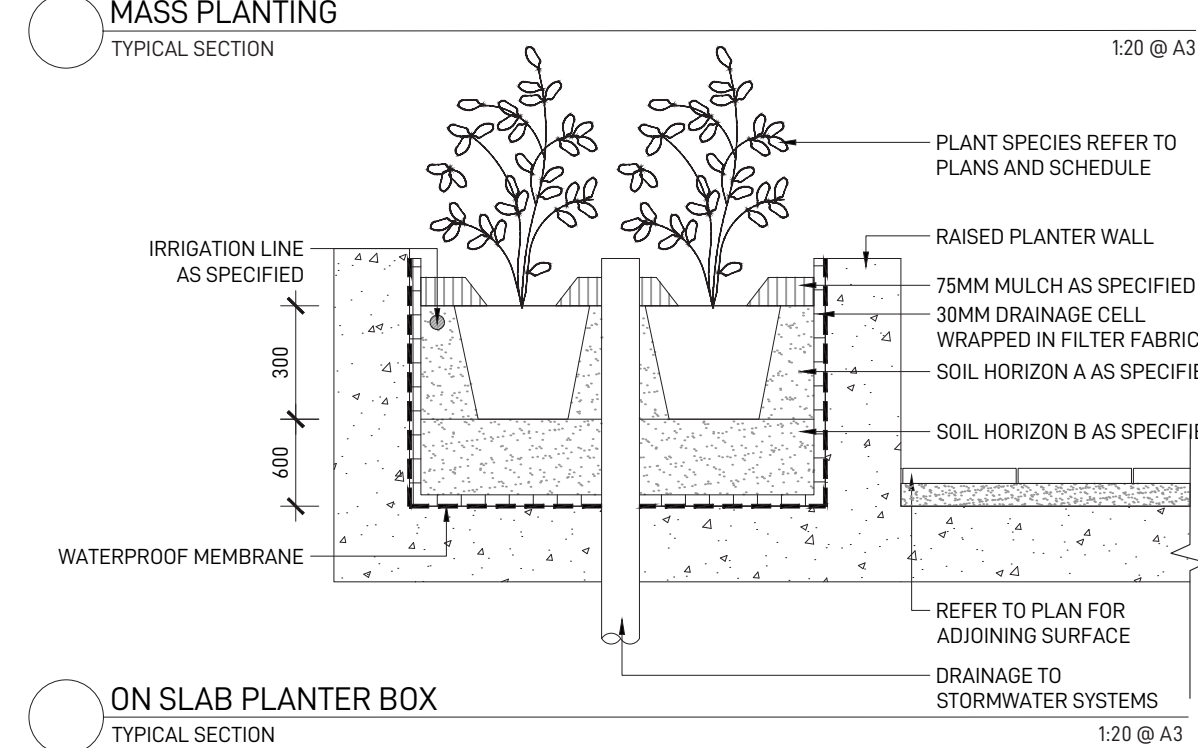
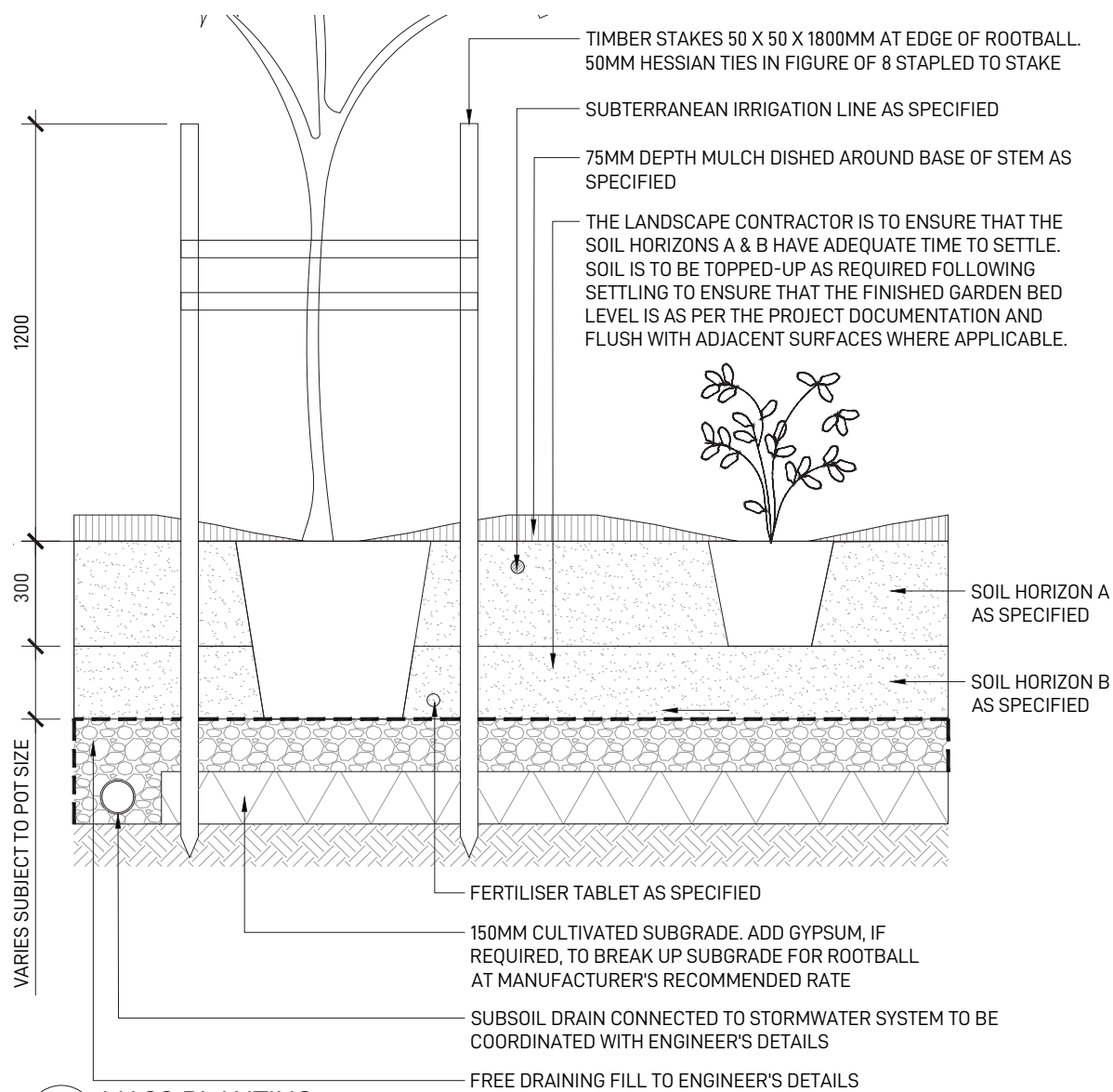
Legend

1. Pre-fabricated GRC planter box with shrubs and integrated seating.
2. Soft-fall mound with opportunities for climbing holds, tunnels and slides.
3. Pre-fabricated GRC planter boxes with varying heights providing opportunities for lush understorey planting.

Plant Schedule

CODE	BOTANICAL NAME	COMMON NAME	HEIGHT	NATIVE	POT SIZE
SHRUBS					
DOR EXC	DORYANTHES EXCELSA	GYMEA LILY	1-2M	✓	300MM
NAN OBS	NANDINA 'OBSESSION'	SACRED BAMBOO	0.7M		200MM
PIT LIT	PITTOSPORUM 'LITTLE GEM'	KOHUHU	0.9M	✓	200MM
GRASSES & GROUNDCOVERS					
ART SEM	ATRIPLEX SEMIBACCATA	CREEPING SALTBUSH	0.4M	✓	140MM
DIA CLA	DIANELLA 'CLARITY BLUE'	BLUE FLAX LILY	0.6M	✓	140MM
LIR SIL	LIRIOPE 'SILVERLAWN'	LILY TURF	0.3M		140MM
ROS OFF	ROSMARINUS OFFICINALIS PROSTRATUS	CREEPING ROSEMARY	TRAIL		140MM
WES LOW	WESTRINGIA 'LOW HORIZON'	COASTAL ROSEMARY	0.3M	✓	140MM
VIO HED	VIOLA HEDERACEA	NATIVE VIOLET	0.3M	✓	140MM





OUTLINE LANDSCAPE SPECIFICATION

GENERAL

MAINTENANCE SHALL MEAN THE CARE AND MAINTENANCE OF THE LANDSCAPE WORKS BY ACCEPTED HORTICULTURAL PRACTICE AS RECTIFYING ANY DEFECTS THAT BECOME APPARENT IN THE LANDSCAPE WORKS UNDER NORMAL USE. THE LANDSCAPE CONTRACTOR SHALL ATTEND THE SITE ON A WEEKLY BASIS TO MAINTAIN THE LANDSCAPE WORKS FOR THE FULL TERM APPROVED AT CC STAGE OF THE MAINTENANCE PERIOD (COMMENCING FROM PRACTICAL COMPLETION).

RUBBISH REMOVAL

DURING THE TERM OF THE MAINTENANCE PERIOD THE LANDSCAPE CONTRACTOR SHALL UNDERTAKE RUBBISH REMOVAL FROM THE SITE ON A WEEKLY BASIS TO ENSURE THE SITE REMAINS IN TIDY CONDITION.

WEED ERADICATION

WEED GROWTH THAT MAY OCCUR IN, PLANTED OR MULCHED AREAS IS TO BE REMOVED USING ENVIRONMENTALLY ACCEPTABLE METHODS I.E. NON-RESIDUAL GLYPHOSATE HERBICIDE, (E.G. 'ROUNDUP', APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS) OR HAND WEEDING.

TREE REPLACEMENT

TREES SHALL SHOW SIGNS OF HEALTHY VIGOROUS GROWTH AND BE FREE FROM DISEASE AND NOT EXHIBIT SIGNS OF STRESS PRIOR TO HANDOVER TO THE CLIENT. ANY TREES OR PLANT THAT DIE OR FAIL TO THRIVE, OR ARE DAMAGED OR STOLEN WILL BE REPLACED. REPLACEMENT MATERIAL SHALL HAVE THE MAINTENANCE PERIOD EXTENDED IN ACCORDANCE WITH THE LANDSCAPE CONTRACT CONDITIONS. TREES AND PLANT MATERIALS SHALL BE EQUAL TO THE MINIMUM REQUIREMENTS OF SPECIES SPECIFIED AND APPROVED MATERIAL DELIVERED TO SITE. SHOULD THE CONDITION DECLINE FROM THE APPROVED SAMPLE THE SUPERINTENDENT RESERVES THE RIGHT TO REJECT THE TREE / PLANTS. FREQUENCY: AS REQUIRED.

PRUNING

SELECTIVE PRUNING MAY BE REQUIRED DURING THE ESTABLISHMENT PERIOD TO PROMOTE A BALANCED CANOPY STRUCTURE. THESE ACTIVITIES SHALL BE CARRIED OUT TO THE BEST HORTICULTURAL AND INDUSTRY PRACTICE. ALL PRUNED MATERIAL IS TO BE REMOVED FROM SITE.

IRRIGATION

A LOW VOLUME DRIP IRRIGATION SYSTEM MAY BE INSTALLED AT THE DISCRETION OF THE DEVELOPER. POSITION OF CONTROL BOX, SOLENOIDS AND IRRIGATION CONDUITS TO BE DESIGNED BY QUALIFIED IRRIGATION ENGINEER AT CC STAGE. CONTROLLERS SHALL BE MOUNTED ON A STABLE WALL, POWER RACK, OR FORMED AND CONSTRUCTED CONCRETE BASED PEDESTAL MOUNT. PERFORMANCE SPECIFICATION TO BE PROVIDED BY LANDSCAPE ARCHITECT, NOMINALLY 25MM DELIVERED TO PLANT AREAS EACH WEEK DURING ESTABLISHMENT (DEPENDENT ON WEATHER CONDITIONS). AFTER ESTABLISHMENT, IRRIGATION RATES CAN BE DECREASED IN CERTAIN AREAS OF THE LANDSCAPE DEPENDING ON THE SPECIES.

WATERING

IMPLEMENT AN APPROPRIATE HAND WATERING REGIME IN AREAS NOT IRRIGATED IN ASSOCIATION WITH CURRENT WATERING PROGRAMME TO MAINTAIN PLANT HEALTH AND VIGOUR. THE PROGRAM SHALL REFLECT SEASONAL CONDITIONS AND PLANT SPECIES. FREQUENCY: WEEKLY OR AS REQUIRED.

DRAINAGE

ALL LANDSCAPE AREAS ARE TO HAVE POSITIVE DRAINAGE TO SW SYSTEMS. IF AREAS OF POOR DRAINAGE ARE IDENTIFIED ON SITE THEN THIS SHOULD BE BROUGHT TO THE SITE SUPERINTENDENTS ATTENTION. INSTALL AGG LINES IF REQUIRED.

SOILS

HORIZON A - GARDEN BEDS ON NATURAL GROUND
A SANDY LOAM TO CLAY LOAM TOPSOIL MIX DESIGNED FOR GENERAL PURPOSE, ON-GRADE LANDSCAPE GARDEN BED PLANTING OF GRASSES, WOODY AND HERBACEOUS ANNUALS AND PERENNIALS THAT HAVE HIGH NUTRIENT REQUIREMENT FOR SUSTAINED OPTIMUM GROWTH, AND ARE NOT SUBJECT TO COMPACTION BY PEDESTRIAN AND OTHER FOOT TRAFFIC. HEAVIER TEXTURED SOILS IN THIS

SPECIFICATION MAY REQUIRE ENGINEERED SOLUTIONS WHERE EXCESSIVE WETNESS IS ANTICIPATED. NOTE THAT ORGANIC SOIL VARIANT SHOULD NOT BE CHOSEN FOR LOW PLANTINGS AND SHOULD NOT BE USED BELOW 300MM. PLANTING METHODS INCLUDE DIRECT SEEDING, TUBE AND POTTED SPECIMENS UP TO 45L

HORIZON B - GARDEN BEDS ON SLAB

THIS SPECIFICATION DESCRIBES THE FORMULATION OF AN OPEN GRANULAR WELL DRAINED GROWING MEDIA WITH A SATURATED DENSITY OF LESS THAN 2400 KG/M3 (2.4KG/L) FOR USE IN ON-SLAB APPLICATIONS, INCLUDING GREEN ROOFS WITH AN EXPECTATION OF LONGEVITY. IT IS A TOPSOIL FORMULATION TO BE USED IN THE SURFACE 300MM OF ALL ON-SLAB INSTALLATIONS INCLUDING PLANTER BOXES, CONTAINERS AND GARDEN BEDS. IN ORDER TO MAINTAIN STRUCTURE AND POROSITY OVER EXTENDED PERIODS, AND TO AVOID SLUMPING AND VOLUME LOSS OVER TIME, THE FORMULATION MUST EMPLOY LOW DENSITY MINERAL COMPONENTS SUCH AS ASH, PERLITE, SCORIA, PUMICE AND DIATOMACEOUS EARTH, OR ARTIFICIAL COMPONENTS SUCH AS UREA FORMALDEHYDE AND STYROFOAM. PHYSICALLY THE MEDIA PROPERTIES OF A POTTING MEDIA AND IS ASSESSED USING THE METHODOLOGY OF AS 3743.

CULTIVATION

ALL GARDEN BEDS TO BE CULTIVATED TO A MIN DEPTH OF 150MM AND TREE PITS TO THE DEPTH OF THE ROOT BALL ONLY. IF ADDITIVES SUCH AS GYPSUM ARE REQUIRED CONDUCT THIS AFTER CULTIVATION INTO THE TOP 100MM OF SOIL.

PLANTING

ALL PLANTING TO BE GROWN TO NATSPEC SPECIFICATIONS. CONTRACTOR TO PREPARE SITE FOR PLANTING INCLUDING WATERING, HANDLING, SETTING OUT AND EXCAVATION. EXCAVATE A HOLE FOR EACH PLANT LARGE ENOUGH TO PROVIDE NOT LESS THAN 100MM ALL AROUND THE ROOT SYSTEM OF THE PLANT. FOR TREE PLANTING EACH HOLE SHALL BE DUG WITH A SHOVEL, BACKHOE OR SIMILAR TOOL. INDIVIDUAL HOLES SHALL BE EXCAVATED TO ALLOW ROOT SYSTEM TO SIT FLAT ON THE EXCAVATED HOLE AND 400MM TO EACH SIDE OF THE ROOT SYSTEM. BACKFILL PLANTING HOLES WITH EXISTING SITE SOIL AND TOPSOIL AS DESCRIBED IN SECTION 'SOIL', PLANT / TREE SHALL BE SET PLUMB, WITH THE ROOT BALL SET SLIGHTLY BELOW THE FINAL SOIL LEVEL.

MULCHING

THE LANDSCAPE CONTRACTOR SHALL SUPPLY AND INSTALL 10MM PINE BARK MULCH TO ALL GARDEN BEDS SHOWN ON THE LANDSCAPE PLANS, TO A MINIMUM DEPTH OF 75MM. ALL MULCH IS TO BE FREE OF DELETERIOUS MATTER SUCH AS SOIL, WEEDS AND STICKS. MULCHED SURFACES ARE TO BE KEPT CLEAN AND TIDY AND FREE OF ANY DELETERIOUS MATERIAL AND FOREIGN MATTER. REINSTATE DEPTHS TO A UNIFORM LEVEL OF 75MM WITH MULCH AS SPECIFIED, MULCH TO BE FREE OF ANY WOOD MATERIAL IMPREGNATED WITH CCA OR SIMILAR TOXIC TREATMENT. MAINTAIN WATERING RINGS AROUND TREES. TOP UP MULCH LEVELS PRIOR TO HANDOVER TO CLIENT.

PEST AND DISEASE CONTROL

THE LANDSCAPE CONTRACTOR SHALL SPRAY FOR PESTS AND DISEASE INFESTATIONS WHEN THE PEST AND FUNGAL ATTACK HAS BEEN POSITIVELY IDENTIFIED AND WHEN THEIR POPULATIONS HAVE INCREASED TO A POINT THAT WILL BECOME DETRIMENTAL TO PLANT GROWTH. APPLY ALL PESTICIDES TO MANUFACTURER'S DIRECTIONS. FREQUENCY: WEEKLY INSPECTION

FERTILISING

PELLETS SHALL BE IN THE FORM INTENDED TO UNIFORMLY RELEASE PLANT FOOD ELEMENTS FOR A PERIOD OF APPROXIMATELY NINE MONTHS EQUAL TO SHIRLEYS KOKEI PELLETS, ANALYSIS 6.3:1.8:2.9 OR SIMILAR APPROVED. KOKEI PELLETS SHALL BE PLACED AT THE TIME OF PLANTING TO THE BASE OF THE PLANT, 50MM MINIMUM FROM THE ROOT BALL AT A RATE OF TWO PELLETS PER 300MM OF TOP GROWTH TO A MAXIMUM OF 8 PELLETS PER TREE. GENERALLY CHECK FOR SIGNS OF NUTRIENT DEFICIENCIES (YELLOWING OF LEAVES, FAILURE TO THRIVE), AND ADAPT FERTILISER REGIME TO SUIT. FERTILISER SHOULD BE APPLIED AT THE BEGINNING AND THE END OF THE (SUMMER) GROWING SEASON.