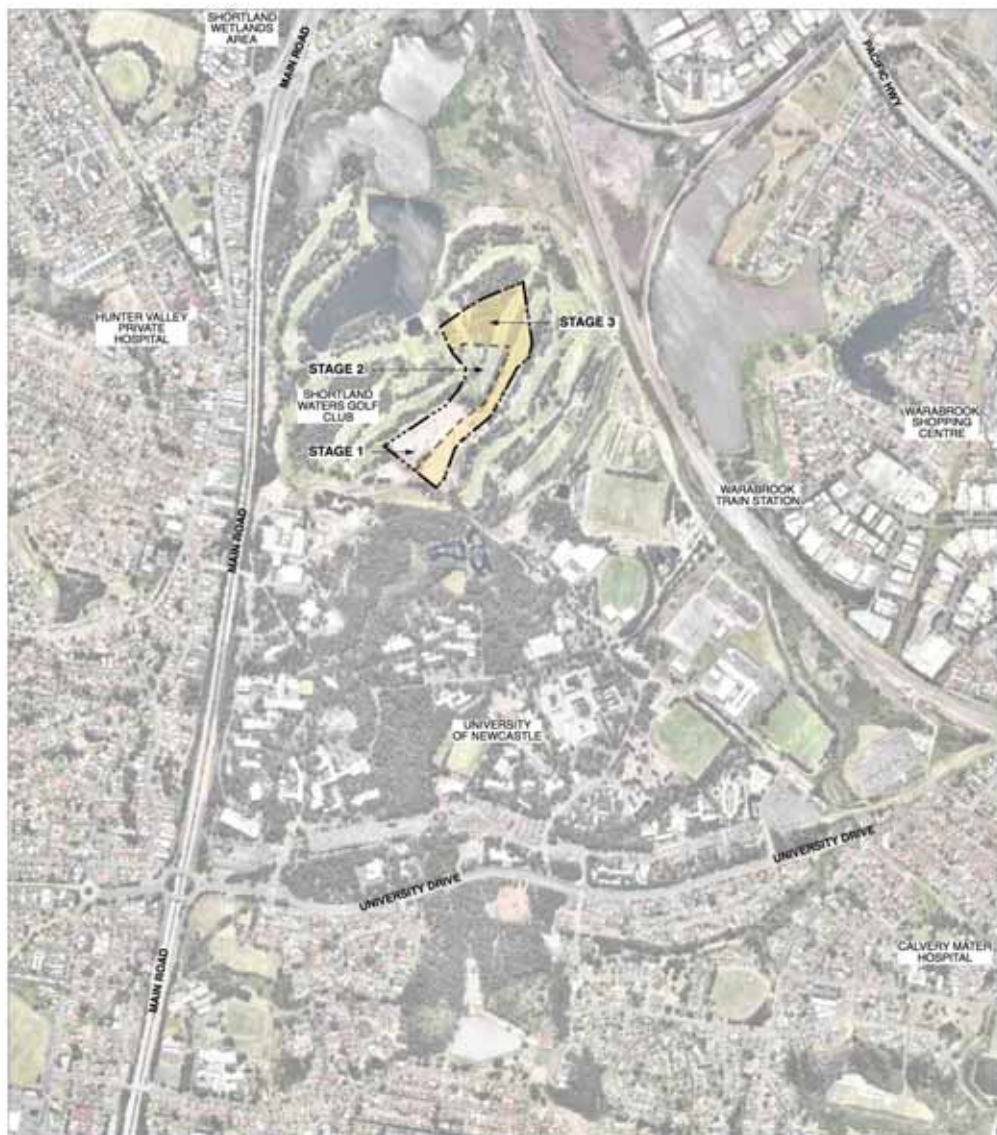




1 LOCATION PLAN
scale NTS

SHORTLAND WATERS RETIREMENT VILLAGE STAGE 3 MASTERPLAN

SHEET NO.	SHEET NAME	REV	Date
LC-001	COVER SHEET	C	12/4/18
LC-002	SITE ANALYSIS	C	12/4/18
LA-001	LANDSCAPE MASTER PLAN	C	12/4/18
LA-002	LANDSCAPE PLAN	C	12/4/18
LA-003	LANDSCAPE PLAN	C	12/4/18
LA-004	LANDSCAPE PLAN	C	12/4/18
LA-005	DETAIL PLAN - TYPICAL UNIT	C	12/4/18
LA-006	DETAIL PLAN - POCKET PARK	C	12/4/18
LA-007	LANDSCAPE PLAN - MASTER MAIL AND BIN COLLECTION POINTS	C	12/4/18
LA-008	LANDSCAPE SECTIONS AND ELEVATIONS	C	12/4/18
LA-009	LANDSCAPE SECTIONS AND ELEVATIONS	C	12/4/18
LA-010	LANDSCAPE SECTIONS AND ELEVATIONS	C	12/4/18
LA-011	LANDSCAPE SCHEDULES AND DESIGN THEMES	C	12/4/18

CHECKLIST FOR DEVELOPMENT APPLICATIONS (In accordance with MCC Technical Manual - Landscaping 2012)

This Landscape DA Documentation (LA-001-LA-011) and the Landscape Design Report has been prepared by Moir Landscape Architecture Pty Ltd in accordance with Newcastle City Councils Development Control Plan 2012 and all relevant guidelines.

1. Existing Site - SITE & PHOTOGRAPHIC ANALYSIS PLAN (LP02/03)

- Site location
- Boundaries and boundary dimensions
- Site area
- Existing vegetation and soils (including description of groundcover)
- Water elements (eg creeks, rivers, swamps)
- Heritage elements
- Adjacent existing landuses
- Other landscape features (eg cliffs, quarries, sand dunes, riverbanks etc)
- Contours or spot levels across the whole site
- Location and uses of existing buildings
- Location and types of services to and across the site
- Photographs and photo panoramas should be included for major projects

2. Proposed Development - LANDSCAPE CONCEPT PLAN (LP04/05)

- Proposed new buildings and boundaries
- Proposed open space & uses eg passive or recreation, informal areas
- Proposed drainage systems: detention basins, channels etc
- Proposed finished levels and extent of cut/fill eg contours or spot levels
- Existing trees to be retained
- Proposed planting principles: street tree themes, wildlife corridors, buffer planting, shelter screens, indicative species, locations etc
- Proposed retaining walls, fences with indicative height, material, including privacy screens,
- Proposed maintenance requirements eg high, medium, low areas
- Proposed pedestrian access eg footpaths, walking tracks, cycleways
- Proposed surface treatments (surf, paving, planted areas, water elements)

- Proposed bank stabilisation, including batters
- Proposed services and easements describing type of utility
- Hazard reduction requirements, if applicable
- Proposed roads, driveways and parking areas

- 3. Information to be included on Site Plan - TITLESBLOCK
- Site address
- Applicants name, address and contact number
- Consultants name, address and contact number
- Project title
- Scale of drawing (use only standard metric scale eg 1:500, 1:200 etc)
- North point
- Date of drawing
- Plan reference number
- 3 copies submitted to Council

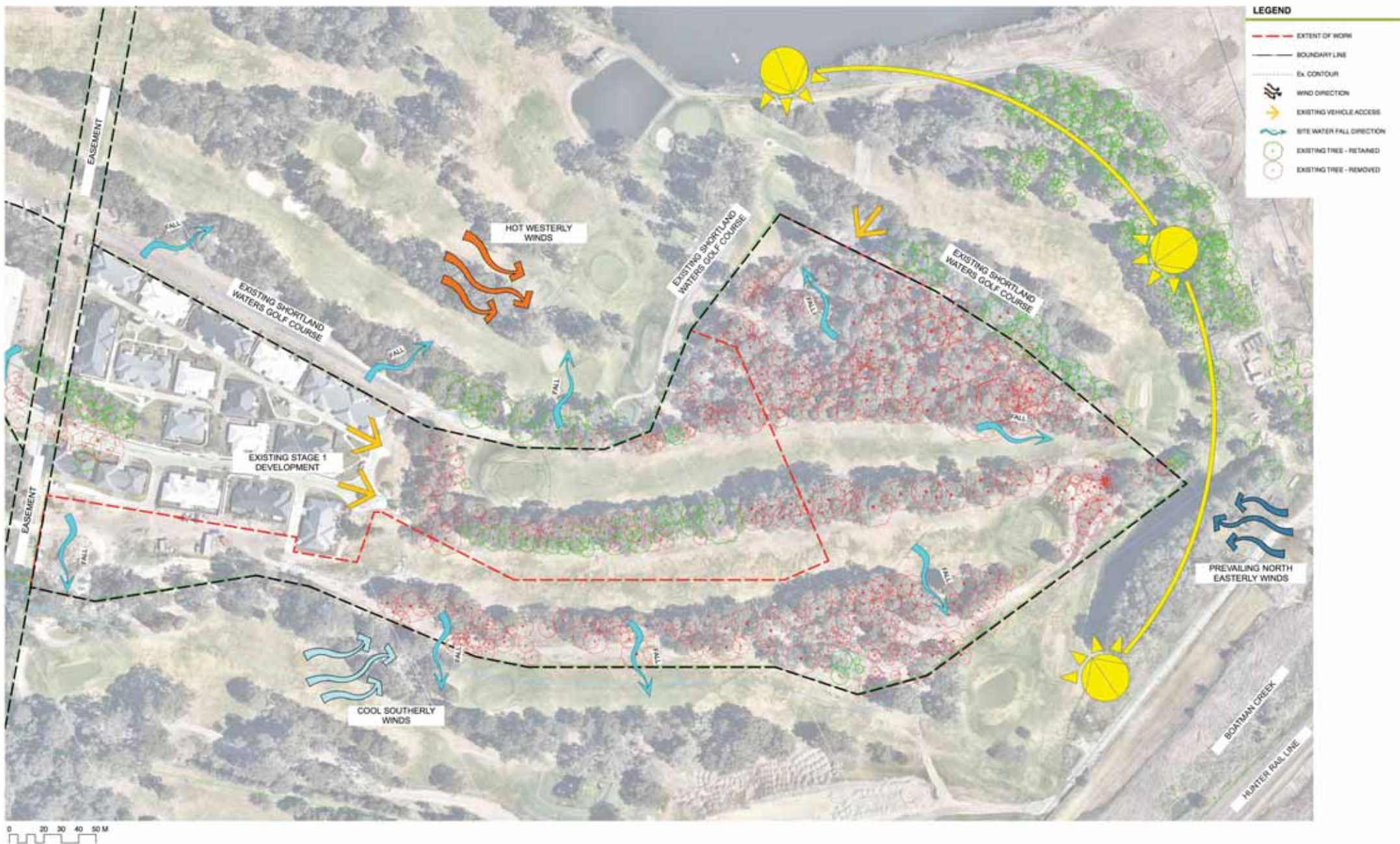
CONSULTANTS DECLARATION

I David Muir have prepared this documentation and hold qualifications to meet the requirements of Newcastle City Council for this category of development as outlined in the DCP. I have familiarised myself with the sections of the DCP and guidelines relevant to the landscape proposal for this development.

Category of Proposal: 3
Qualification: B.L.Arch
Institution: University of Cenders
Year of Graduation: 1997
Years of Practice: 20

Signature:

David Muir



SITE ANALYSIS PLAN - LOCAL CONTEXT
scale 1:10000A1



1 LANDSCAPE SITE PLAN - DEVELOPMENT STAGE 3
scale 1:1000&A1

- LEGEND**
- EXISTING TREES TO BE RETAINED
 - EXISTING CONTOURS
 - +RL15.60 PROPOSED SPOT LEVEL
 - STAGE BOUNDARY
 - BUGGY PARKING
 - CONCRETE PATH
 - PEDESTRIAN CROSSING POINT
 - BUILDING FOOTPRINT
 - CONCRETE DRIVEWAY/PATIO (Refer to Architect)
 - TURF
 - BIO RETENTION AREA (Refer to Engineer)
 - COMMUNAL MAIL BANK
 - SEATING
 - RETAINING WALL (Refer to Engineer)
 - LIGHT BOLLARD
 - STORMWATER PIT (Refer to Engineer)
 - SHELTER & AMENITIES
- TREES**
- Trees have been selected to define space and function, to provide privacy, seasonal variation and habitat. Planting of the streetscape varies from the species selection in the open space areas, and again varies in the larger mass planting areas between buildings.
- Species include:
- Eucalyptus microcorys* (Tallwood)
 - Waterhousea floribunda*
 - Hymenosporum flavum* (Native Frangipani)
 - Cupressus anacardioidea* (Tuckeroo)
 - Pyrus calleryana* (Callery Pear)
 - Brachychiton acerifolius* (Flame Tree)
 - Blackhousea myrtifolia* (Lemon Myrtle)
- MASS PLANTING**
- Three different types of mass planting have been defined in the masterplan to denote different uses: Open Space, Streetscape and Private Space.
- Trees, accent planting and groundcovers each contribute to the amenity of each space, provide a variety of levels of maintenance requirements and help to define the function of each area. Species have been selected that reflect the existing vegetation of the site, the local climate as well as provide some moments of seasonal interest.
- GROUND COVERS**
- Open Space:**
Low native ground covers are used on the perimeter of the open space areas. These plants will stabilise the better and have low maintenance requirements.
- Streetscape:**
Low native grasses are used within the streetscape to provide a low maintenance edge whilst maintaining good sightlines.
- Private Space:**
Mature of native and exotic species of a residential scale. Screening planting provided on each property boundary to give privacy between buildings and from the adjacent land-uses.
- Screening:**
Species suitable for screening planted on unit boundaries to provide privacy.
- Syzygium cascade* (Silkybilly)
 - Syzygium resilience* (Resilience Wylie)
 - Lopetium chinensis* (China doll)





1 LANDSCAPE SITE PLAN - NORTH WEST
scale 1:500 @ A1



Shortland Waters Stage 3

CLIENT:
AMED

ARCHITECT:
PALADIN PROJECTS

ENGINEER
NORTHROPREVISION:
REV C 12-04-2018

NOTE:
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SCALE: 500 @ A1 LA-002



KEY LANDSCAPE ELEMENTS

1. 10m Landscape buffer between development site and existing golf course. Mosquito control to be undertaken periodically.
2. Provision of communal open space areas with sheltered amenities and lighting.
3. Native species street trees located along streets.
4. Bin storage areas and communal mailboxes to be equally distributed to ensure ease of accessibility.
5. Wide planting beds buffer and units from road network/public space.
6. Large native accent tree species to be situated at major viewpoint locations and to define key nodes.
7. Material/colour change in road at major crossing points.
8. Underground OSD Tank. Refer to Engineers.



1 LANDSCAPE SITE PLAN - SOUTH

scale 1:500 @ A1



2 LANDSCAPE SITE PLAN - EAST

scale 1:500 @ A1



LEGEND

- EXISTING TREES TO BE RETAINED
- EXISTING CONTOURS
- PROPOSED SPOT LEVEL
- STAGE BOUNDARY
- BUGGY PARKING
- CONCRETE PATH
- PEDESTRIAN CROSSING POINT
- BUILDING FOOTPRINT
- CONCRETE DRIVEWAY/STAND (Refer to Architect)
- TURF
- BIO RETENTION AREA (Refer to Engineer)
- COMMUNAL MAIL BANK
- SEATING
- RETAINING WALL (Refer to Engineer)
- LIGHT BOLLARD
- STORMWATER PIT (Refer to Engineer)
- SHELTER & AMENITIES

TREES

Trees have been selected to define space and function, to provide privacy, seasonal variation and habitat. Planting of the streetscape varies from the species selection in the open space areas, and again varies in the larger mass planting areas between buildings.

Species include:

- Eucalyptus monocorymb* (Yellowwood)
- Waterhousea floribunda*
- Hymenocarpus laevis* (Native Frangipani)
- Cupressus ascaroides* (Tuckeroo)
- Pinus calleryana* 'chandleri'
- Brachychiton acuminatus* (Same Tree)
- Backhousea myrtilloides* (Lemon Myrtle)

MASS PLANTING

Three different types of mass planting have been defined in the masterplan to denote different uses: Open Space, Streetscape and Private Space.

Trees, accent planting and groundcovers each contribute to the amenity of each space, provide a variety of levels of maintenance requirements and help to define the function of each area. Species have been selected that reflect the existing vegetation of the site, the local climate as well as provide some moments of seasonal interest.

GROUND COVERS

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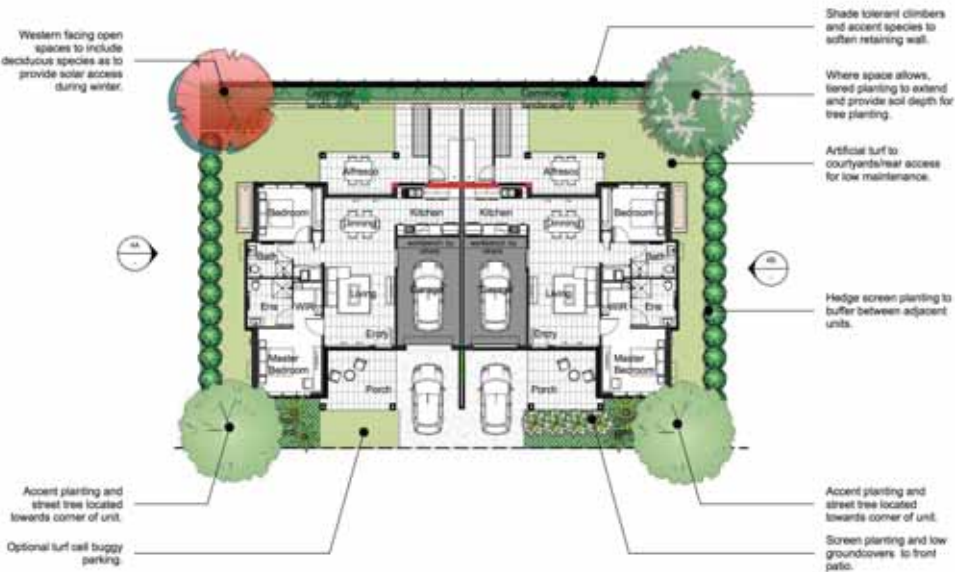
Screening Planting:
Species suitable for screening planted on unit boundaries to provide privacy.

- Syzygium cascadii* (Lillypilly)
- Syzygium resilience* (Resilience Lillypilly)
- Lanceolatum chinensis* (China Doll)





1 LANDSCAPE PLAN - TYPICAL SINGLE LEVEL UNIT
scale 1:150BA1



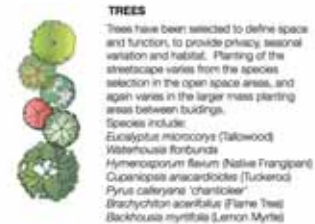
3 LANDSCAPE PLAN - TYPICAL 2 LEVEL UNIT PLAN
scale 1:150BA1



2 ELEVATION - TYPICAL SINGLE LEVEL UNIT
scale 1:150BA1



4 ELEVATION - TYPICAL 2 LEVEL UNIT
scale 1:150BA1



PEDESTRIAN LINKS
Extensive pedestrian links through the development for local residents to take advantage of the full site, connecting both active and passive recreation areas

Retaining walls. Refer to the Engineering Documentation

Open grass areas provide the opportunity for a variety of both passive and active uses

TREE PLANTING
Feature tree planting provides a visual buffer and fragmentation of the adjoining residential unit. Canopy trees with low understorey planting will maintain clear sightlines within the communal spaces to provide a sense of security

Shade structure with picnic table and BBQ



Existing OSD tank under road. Refer to Stage 1 Documentation

PEDESTRIAN LINKS
Contrasting pavement colour to be used at crossing points to signal pedestrian and vehicle interaction

Retaining walls. Refer to the Engineering Documentation

TREE PLANTING
Feature tree planting provides visual interest and an informal method of wayfinding across the site. Canopy trees with low understorey planting will maintain clear sightlines within the communal spaces to provide a sense of security

1 LANDSCAPE PLAN - POCKET PARK SOUTH

scale 1:1500A1



Proposed OSD tank under road. Refer Engineers Documentation

TREE PLANTING
Feature tree planting provides visual interest and an informal method of wayfinding across the site. Canopy trees with low understorey planting will maintain clear sightlines within the communal spaces to provide a sense of security

Park Bench Seating

Mail and Bin storage facility. Refer to Sheet LA-007 for additional information

Open grass areas provide the opportunity for a variety of both passive and active uses



PEDESTRIAN LINKS
Contrasting pavement colour to be used at crossing points to signal pedestrian and vehicle interaction

PEDESTRIAN LINKS
Extensive pedestrian links through the development for local residents to take advantage of the full site, connecting both active and passive recreation areas

Mass planting provides a visual buffer to the adjoining residential unit. Canopy trees with low understorey planting will maintain clear sightlines within the communal spaces to provide a sense of security

TREE PLANTING
Feature tree planting provides visual interest and an informal method of wayfinding across the site. Canopy trees with low understorey planting will maintain clear sightlines within the communal spaces to provide a sense of security

LEGEND

- EXISTING TREES TO BE RETAINED
- EXISTING CONTOURS
- PROPOSED SPOT LEVEL
- STAGE BOUNDARY
- BUGGY PARKING
- CONCRETE PATH
- PEDESTRIAN CROSSING POINT
- BUILDING FOOTPRINT
- CONCRETE DRIVEWAY/AVOID (Refer to Architect)
- TURF
- BIO RETENTION AREA (Refer to Engineer)
- COMMUNAL MAIL BANK
- SEATING
- RETAINING WALL (Refer to Engineer)
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- STORMWATER PIT (Refer to Engineer)
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Mature of native and exotic species of a residential scale. Screening planting provided on each property boundary to give privacy between buildings and from the adjacent land uses.
- Screening:**
Species suitable for screening planted on unit boundaries to provide privacy.
- Syzygium tascadei* (Lilywhip)
 - Syzygium resplendens* (Resplendent Syzygium)
 - Loropetalum chinensis* (China Doll)



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www.moirlandscapearchitects.com.au

Shortland Waters Stage 3

TYPICAL OVER-UNDER UNIT LANDSCAPE TREATMENT

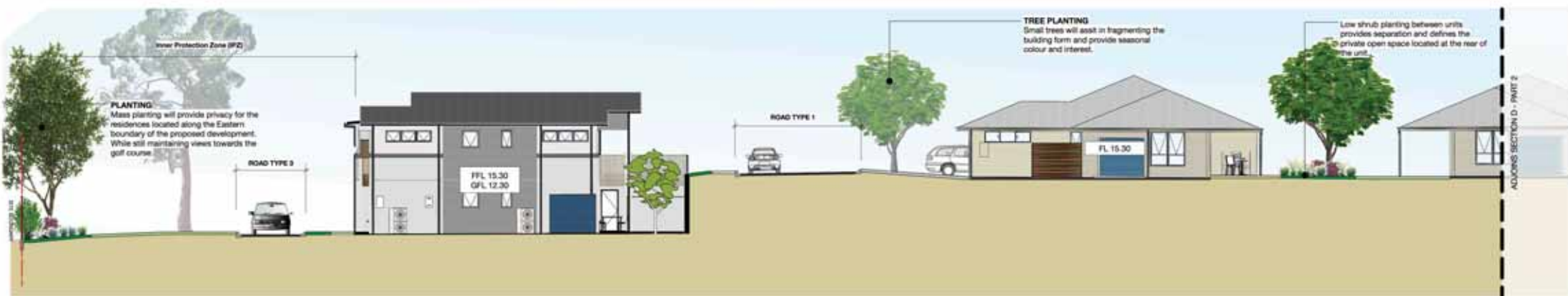
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NOTE: DRAWING PURPOSED FOR APPROVAL ONLY NOT FOR CONSTRUCTION



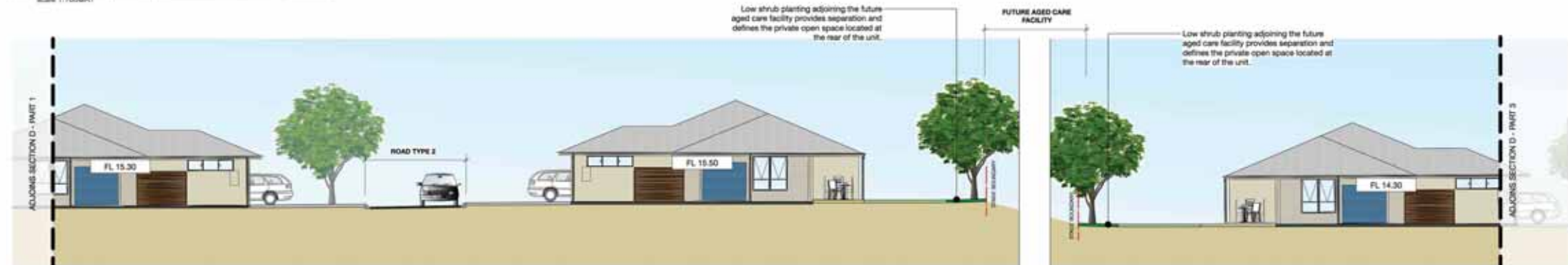
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1 SECTION D (PART 1) - RESIDENTIAL UNITS

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2 SECTION D (PART 2) - RESIDENTIAL UNITS

scale 1:100BA1



3 SECTION D (PART 3) - RESIDENTIAL UNITS

scale 1:100BA1



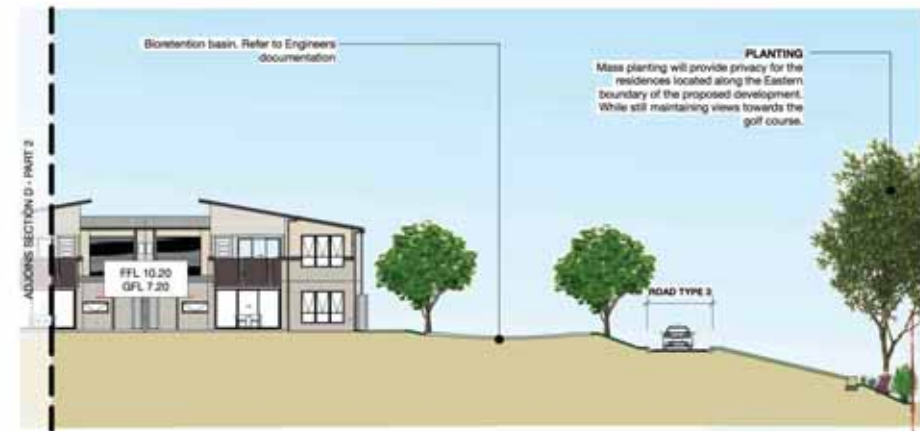
1 SECTION E (PART 1) - NORTHERN RESIDENTIAL UNITS

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2 SECTION D (PART 2) - RESIDENTIAL UNITS

scale 1:150@A1



3 SECTION E - RESIDENTIAL UNITS

scale 1:150@A1



4 SECTION F - RESIDENTIAL UNITS

scale 1:150@A1



1 SECTION A - SOUTHERN POCKET PARK AND RESIDENTIAL UNITS

scale 1:100BA1



2 SECTION B - RESIDENTIAL UNITS

scale 1:100BA1



3 SECTION C - RESIDENTIAL UNITS

scale 1:100BA1

MATERIALS THEMING



PERMEABLE PAVING

EXPOSED AGGREGATE CONCRETE

BROOM FINISH CONCRETE



SKILLION ROOF TIMBER SHELTER

PARK BENCH



SANDSTONE RETAINING WALLS

FEATURE LIGHT BOLLARDS



1500mm TIMBER SLATTED FENCE

1200mm BLACK RAIL FENCE

PLANT SCHEDULE

CODE	SCIENTIFIC NAME	COMMON NAME	POT SIZE	QTY (spacing)	STAKE (Y/N)	MATURE HEIGHT (height x width)
TREES						
BAC myr	Backhousia myrtifolia	Grey Myrtle	75L	As Shown	Y	7m x 3m
BRA ace	Brachydonon acerifolius	Flame Tree	75L	As Shown	Y	15m x 8m
CUP ana	Cupressus anacardioides	Tuckeroo	75L	As Shown	Y	15m x 8m
ELA eum	Elaeagnus eumundi	Quandong	75L	As Shown	Y	8m x 3m
EUC mic	Eucalyptus microcorys	Tallowood	75L	As Shown	Y	40m x 20m
HYM fla	Hymenopodium flavum	Native Frangipani	75L	As Shown	Y	8m x 5m
LAG ind	Lagerströmia indica 'Tuscansia'	Creepe Myrtle	75L	As Shown	Y	8m x 4m
LOP con	Lophostemon confertus	Brushbox	75L	As Shown	Y	15m x 8m
MAG gra	Magnolia grandiflora 'Little Gem'	Magnolia 'Little Gem'	75L	As Shown	Y	5m x 2m
PYR cal	Pyrus calleryana 'Chanticleer'	Ornamental Pear	75L	As Shown	Y	10m x 6m
TRI lau	Tristania laurina	Watergum	75L	As Shown	Y	15m x 6m
WAT flo	Waterhousea floribunda	Weeping Lillypilly	75L	As Shown	Y	15m x 12m
SHRUBS						
ACM all	Acmena 'Alyin Magic'	Dwarf Lilly Pilly	200mm	1/m2	N	
ACM amk	Acmena smithii 'Frescoes'	Lilly Pilly Cv.	200mm	1/m2	N	
GOO ova	Goodenia ovalis	Hop Goodenia	200mm	1/m2	N	
LOR chi	Lonicera chinensis	China doll	200mm	1/m2	N	
MUR pan	Murraya paniculata	Orange Blossom	200mm	1/m2	N	
SYZ cas	Syzygium 'casade'	Lillypilly	200mm	1/m2	N	
SYZ res	Syzygium resilience	Resilience Lillypilly	200mm	1/m2	N	
WES fru	Westringia frutescens	Coastal Rosemary	200mm	1/m2	N	
ACCENT PLANTS						
CYC rev	Cycas revoluta	Cycad	200mm	1/m2	N	
DOR exc	Dorstenia excelsa	Gymea Lilly	200mm	1/m2	N	
PAR tr	Parthenocissus tricuspidata	Boston Ivy	150mm	1/2m2	N	
PHI kan	Philodendron 'Kanak'	Philodendron	200mm	1/m2	N	
GROUND COVERS & LOW LYING PLANTS						
ANI fla	Anigozanthus flavus	Kangaroo Paw	150mm	4/m2	N	
CORL spp.	Cordyline spp.	Cordyline	150mm	1/m2	N	
DIC rep	Dichondra repens	Kidney Weed	100mm	1/m2	N	
DOO asp	Doodia aspera	Prickly Rasp Fern	200mm	2/m2	N	
HBB sca	Hibbertia scandens	Snake Vine	100mm	1/m2	N	
HYM lit	Hymenocallis littoralis	Spider Lilly	150mm	4/m2	N	
MYO par	Mycopodium parvifolium	Creeeping Boottia	100mm	1/m2	N	
SCA alb	Scandelia albida	Pale Fanflower	150mm	4/m2	N	
THA jat	Tachelagiumum jasminoides 'Stictolour'	Star Jasmine Cv.	150mm	2/m2	N	
VIO hed	Viole hederacea	Ivy-Leaved Violet	100mm	6/m2	N	
GRASSES						
CAR app	Carex appressa	Tall Sedge	100mm	4/m2	N	
DIA bor	Dianella 'Border Silver'	Dianella Cv.	150mm	5/m2	N	
DIA cae	Dianella caerulea	Blue Flax Lilly	100mm	6/m2	N	
LIR eve	Liriodendron 'Evergreen Giant'	Evergreen Giant	150mm	2/m2	N	
LDM lon	Lomandra longifolia	Mat Rush	100mm	1/m2	N	
LDM fan	Lomandra longifolia 'Tanika'	Mat Rush Cv.	100mm	4/m2	N	
POA lab	Poa labillardieri 'Eldale'	Tussock Grass	100mm	4/m2	N	
PEN nat	Pennisetum 'Nehay'	Fountaingrass	100mm	4/m2	N	

*Note: Total number of tree plantings for Stage 3 is 340

PLANT ESTABLISHMENT AND MAINTENANCE PERIOD

The planting establishment period shall be 52 weeks during which time the landscape contractor shall undertake the following:

MAINTENANCE LOGBOOK:

Contractor to keep a maintenance record of works carried out on a fortnightly basis. Log should include but not limited to:

- Activities carried out during each attendance;
- Irregularities encountered and actions taken;

NOTE: Maintenance payments will be evaluated on submission of monthly logbooks.

PLANTING:

Commence recurrent planting maintenance works at the completion of planting. Ensure the stock arriving on site is protected and maintained for healthy growth.

Replacements: Continue to replace failed plants or plants damaged during site works. Report any vandalism or theft immediately.

RECURRENT WORK:

Throughout the planting establishment period carry out maintenance work including: watering, weeding, rubbish removal, fertilising, pest and disease control, replanting and, reinstatement of mulch, and keeping the site neat and tidy. Any additional work required should be undertaken and documented in the maintenance log book.

MULCHED SURFACES:

Maintain the surface in a clean and tidy condition and reinstate the mulch as necessary.

WATERING:

LAWN AND PLANTED AREAS:

Generally: Maintain a vigorous healthy appearance.

Application rates: Soak to a depth of 150 mm for lawn and 300 mm for planting. Avoid frequent dampening of the surface. Allow the surface of the soil to partially dry out between waterings. Confirm soaked depth and record in the log book.

Timing: Water at times of day to minimise water evaporation loss. Do not water during the hottest period of Summer days.

Public areas without installed watering systems: Water only in excessive dry periods. Make available all necessary equipment to carry out hand and sprinkler watering as required.

Water restrictions: Coordinate the water supply and confirm the watering regime against federal and state government legislation and restrictions at the time.

HAND WATERING:

General: Manually water all lawn and planting areas in the absence of an irrigation system or until the proposed irrigation system is fully operational.

TEMPORARY IRRIGATION SYSTEM:

The contractor shall design, supply, lay and maintain the system for the supply of water to the whole of the landscape works as indicated on LP02/3.

TAPS:

Refer to engineers plan.

IRRIGATION SYSTEM:

A temporary irrigation system is to be installed for all mass planted beds, new turfed areas, and new tree planting. This system shall be installed and maintained for the duration of the maintenance period (52 weeks).

All irrigation works shall be performed by a licensed irrigation contractor. Materials to be used are to be submitted to the site superintendent for approval. The contractor shall provide design drawings and material specifications/samples prior to commencing work. All works are to be conducted to all current and relevant Australian Standards.

The contractor is to be completely responsible for the coordination of the installation of the irrigation system with other services throughout the site.

Recommended flow rates: The system shall be set up on a trial basis and then adjusted to suit the local requirements and conditions. Once the system is satisfactorily adjusted the contractor shall make fortnightly visits within the establishment period to ensure satisfactory performance of the system and to adjust the watering periods as required. A minimum even coverage of 25mm of water per week is recommended.

NOTE: A temporary system may be as simple as the contractor hand watering with garden hoses if the desired flow rates can be achieved. If this is the preferred approach the contractor should inform the site superintendent.