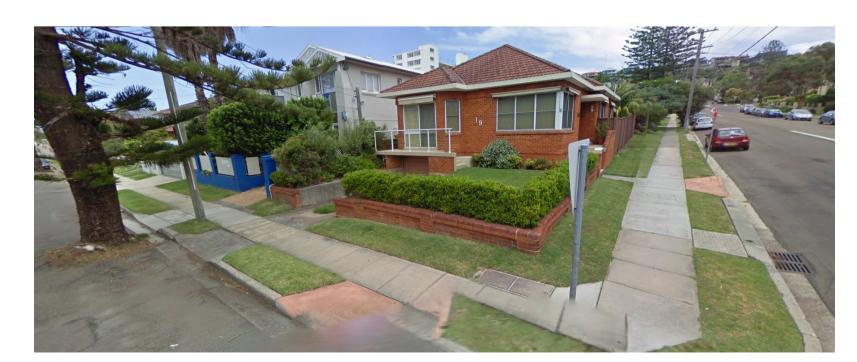


The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.			
Construction	Additional insulation required (R-Value)	Other specifications	
floor - above habitable rooms or mezzanine, framed	nil		
floor - suspended floor above garage, framed	nil		
external wall - framed (weatherboard, fibre cement, metal clad)	3.00 (or 3.40 including construction)		
internal wall shared with garage - cavity brick wall	nil		
ceiling and roof - flat ceiling / pitched roof	ceiling: 3.5 (up), roof: foil/sarking	unventilated; medium (solar absorptance 0.475-0.70)	

## O3 Schedule of Basix Commitments - As per Certificate No.1023645S

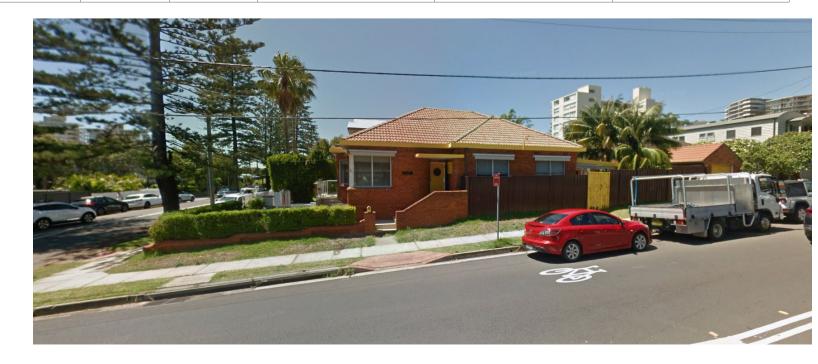


View to Existing Residence (subject site)
No.19 from Cnr Kooloora Ave and Charles St (courtesy Google Street View)

# Windows, glazed doors and skylights The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door. The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table. The following requirements must also be satisfied in relation to each window and glazed door: • For the following glass and frame types, the certifier check can be performed by visual inspection. • Aluminium single clear • Aluminium double (air) clear • Timber/uPVC/fibreglass single clear • Timber/uPVC/fibreglass double (air) clear • For other glass or frame types, each window and glazed door must be accompanied with certification showing a U value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range of those listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. Frame and glass types shown in the table below are for reference only. • Vertical external louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed. • Overshadowing buildings/vegetation must be of the height and distance from the centre and the base of the window and glazed

door, as specified in the 'overshadowing' column.

Window/glazed door no.	Maximum height (mm)	Maximum width (mm)	Туре	Shading Device (Dimension within 10%)	Overshadowing
North-East facing					
W01	1790	3000	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W02	2700	1540	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 2850 mm, 0 mm above head of window or glazed door	not overshadowed
W03	3520	600	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 2400 mm, 2100 mm above head of window or glazed door	not overshadowed
W04	1200	2800	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 850 mm, 150 mm above head of window or glazed door	not overshadowed
W05	2140	900	timber/UPVC/fibreglass, single, clear	eave 850 mm, 125 mm above head of window or glazed door	not overshadowed
W06	1750	860	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 2400 mm, 450 mm above head of window or glazed door	not overshadowed
W07	800	460	timber/UPVC/fibreglass, single, clear	eave 1800 mm, 400 mm above head of window or glazed door	not overshadowed
South-East facing					
W08	680	1800	timber/UPVC/fibreglass, single, clear	eave 500 mm, 1150 mm above head of window or glazed door	>4 m high, 2-5 m away
W09	680	1500	timber/UPVC/fibreglass, single, clear	eave 500 mm, 1150 mm above head of window or glazed door	>4 m high, 2-5 m away
W10	1540	900	timber/UPVC/fibreglass, single, clear	eave 500 mm, 300 mm above head of window or glazed door	>4 m high, 2-5 m away
W11	1540	900	timber/UPVC/fibreglass, single, clear	eave 500 mm, 300 mm above head of window or glazed door	>4 m high, 2-5 m away
W12	1200	2000	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 550 mm, 100 mm above head of window or glazed door	not overshadowed
W13	1200	1600	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 850 mm, 100 mm above head of window or glazed door	not overshadowed
W14	1200	1600	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 850 mm, 100 mm above head of window or glazed door	not overshadowed
W15	1200	600	timber/UPVC/fibreglass, single, clear	eave 850 mm, 100 mm above head of window or glazed door	not overshadowed



View to Existing Residence (subject site)
No.19 from Charles St (courtesy Google Street View)

### **Drawing List**

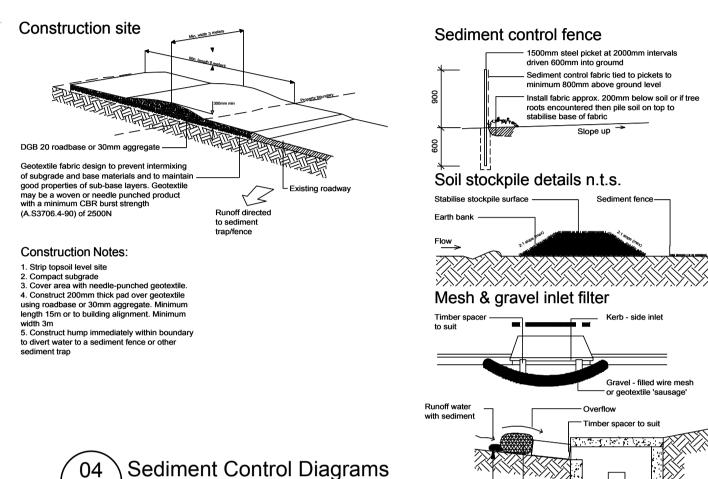
DA A100-A Cover Sheet, Site Analysis, Basix Commitments

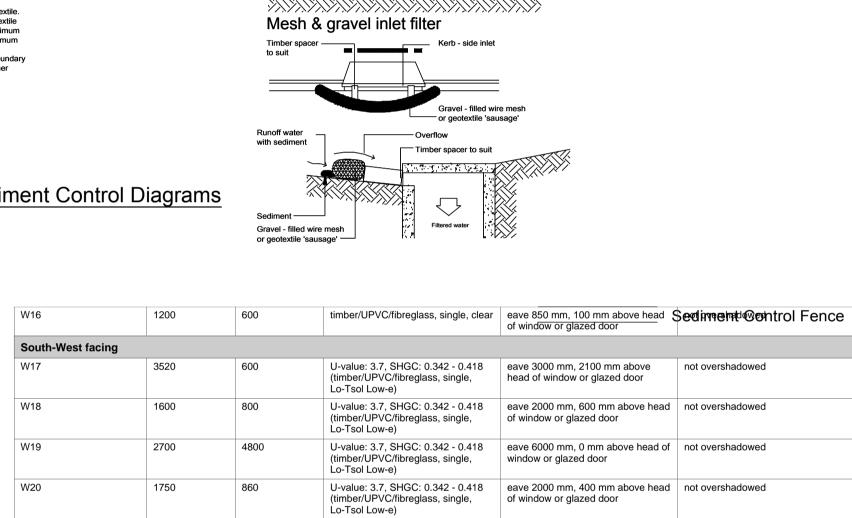
& Site Photos

DA A100-A Lower Ground, Ground & First Floor Plans

DA A200-A Elevations and Sections DA A300-A Shadow Diagrams

SITE	ANAL	YSIS CA	LCS.
SITE AREA			376.8 m²
SOFT LANDS	CAPE		
PERMISSIB PROPOSED		(40% Site Area) (40.2%)	150.72 m <sup>2</sup> 151.3 m <sup>2</sup>





South-West fac	ing				
W17	3520	600	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 3000 mm, 2100 mm above head of window or glazed door	not overshadowed
W18	1600	800	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 2000 mm, 600 mm above head of window or glazed door	not overshadowed
W19	2700	4800	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 6000 mm, 0 mm above head of window or glazed door	not overshadowed
W20	1750	860	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 2000 mm, 400 mm above head of window or glazed door	not overshadowed
W21	800	460	timber/UPVC/fibreglass, single, clear	eave 1300 mm, 200 mm above head of window or glazed door	not overshadowed
W22	2100	3320	U-value: 2.3, SHGC: 0.171 - 0.209 (timber/UPVC/fibreglass, double (air), Lo-Tsol Low-e/clear)	eave 850 mm, 100 mm above head of window or glazed door	not overshadowed
North-West faci	ing				
W23	500	2130	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W24	400	2710	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W25	2700	360	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	eave 1450 mm, 0 mm above head of window or glazed door	not overshadowed
W26	1300	600	timber/UPVC/fibreglass, single, clear	eave 850 mm, 3150 mm above head of window or glazed door	not overshadowed
W27	1600	800	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W28	1600	800	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W29	1750	1810	U-value: 3.7, SHGC: 0.342 - 0.418 (timber/UPVC/fibreglass, single, Lo-Tsol Low-e)	external louvre/vertical blind (adjustable)	not overshadowed
W30	1200	600	timber/UPVC/fibreglass, single, clear	eave 850 mm, 100 mm above head of window or glazed door	not overshadowed
W31	800	4400	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind (adjustable)	not overshadowed
W32	1200	2000	timber/UPVC/fibreglass, single, clear	external louvre/vertical blind	not overshadowed

(adjustable)

# Hot water The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5 stars. Natural lighting The applicant must install a window and/or skylight in 4 bathroom(s)/toilet(s) in the development for natural lighting. Alternative energy The applicant must install a photovoltaic system with the capacity to generate at least 2 peak kilowatts of electricity as part of the development. The applicant must energet this system to the development's electrical system.



Preliminary

19.7.2019

**PROPOSED** 

**DEVELOPMENT** 

Figured dimensions to be taken in pall dimensions on job before comme		
Copyright remains the property of Pla of the whole or part of this docume The information, ideas and concepts	ent constitutes an infringem	ent of copyrigh
project	project #	19-774
Golledge McLean F	. ,	19-774
• •	. ,	19-774

Lot 16 Section 2 DP.7022

Mr W. Golledge and Mrs L. McLean

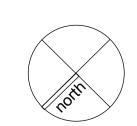
Location Plan, Site Analysis & Basix Commitments

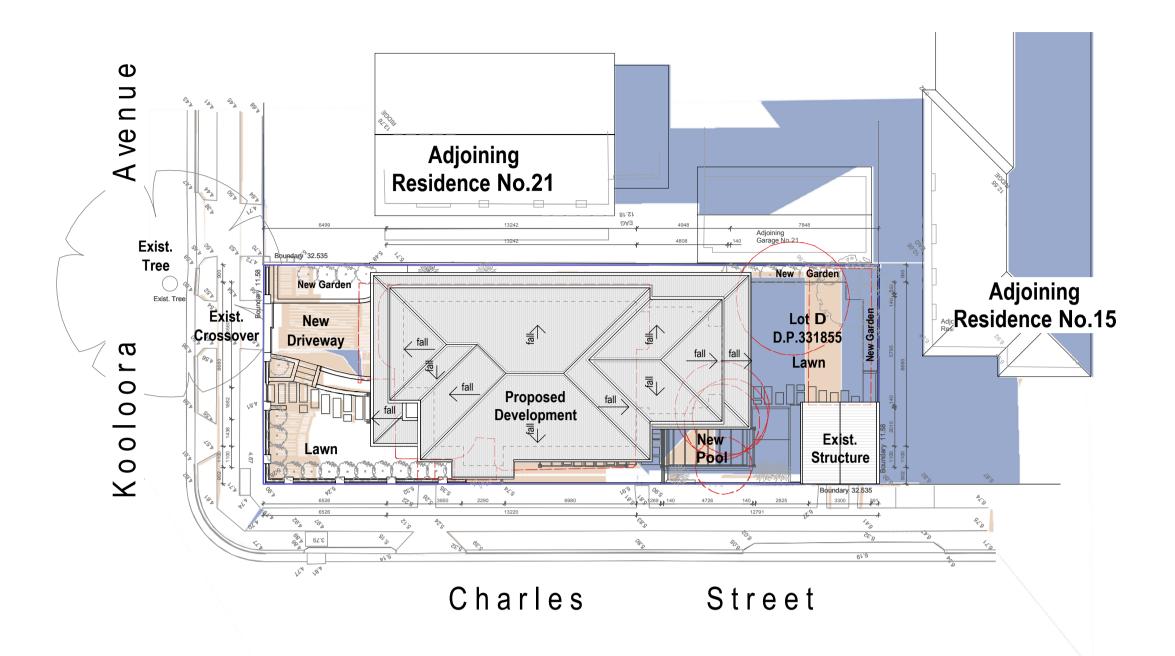
printed drawn ckd scale@A1
19/7/19 KvB JH 1:100

DEVELOPMENT APPLICATION

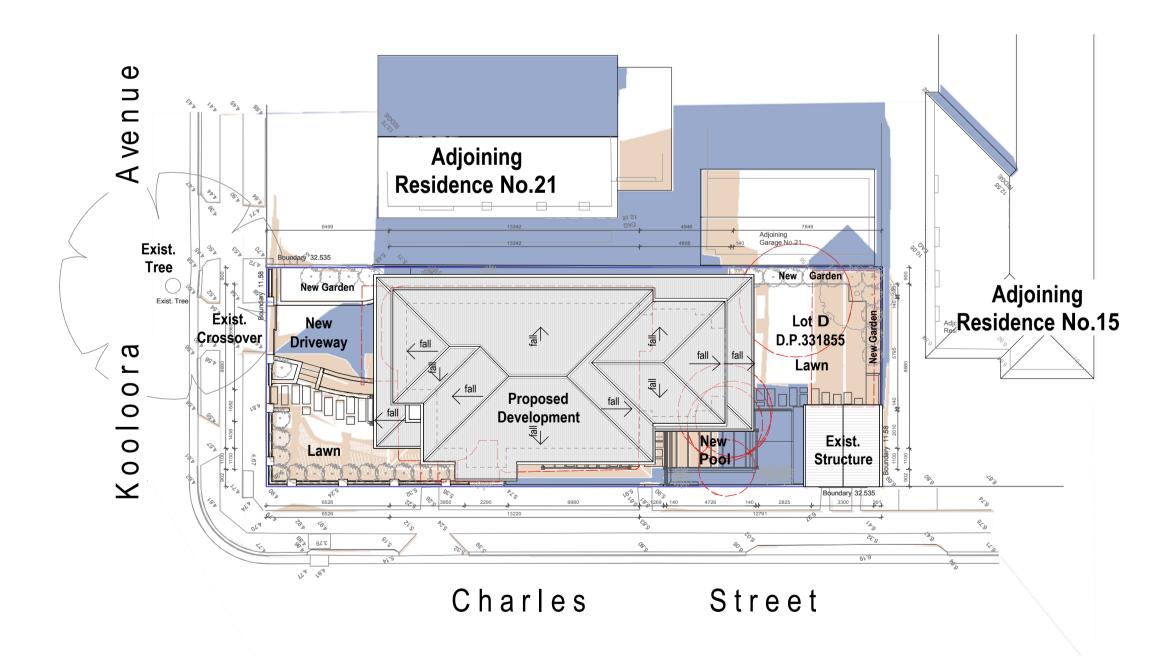
John J F Playoust & Co Pty Limited ACN 008 503 188 & Brett Churcher Architects Pty Ltd A C N 003 751 611 trading as Playoust Churcher Architects

stage	drawing #		
DA	A000		
11 marian street killara nsw 2071 T 02 9498 8811 F 02 9498 4970	PLAYOUST CHURCHER		
info@playoustchurcher.com.au			



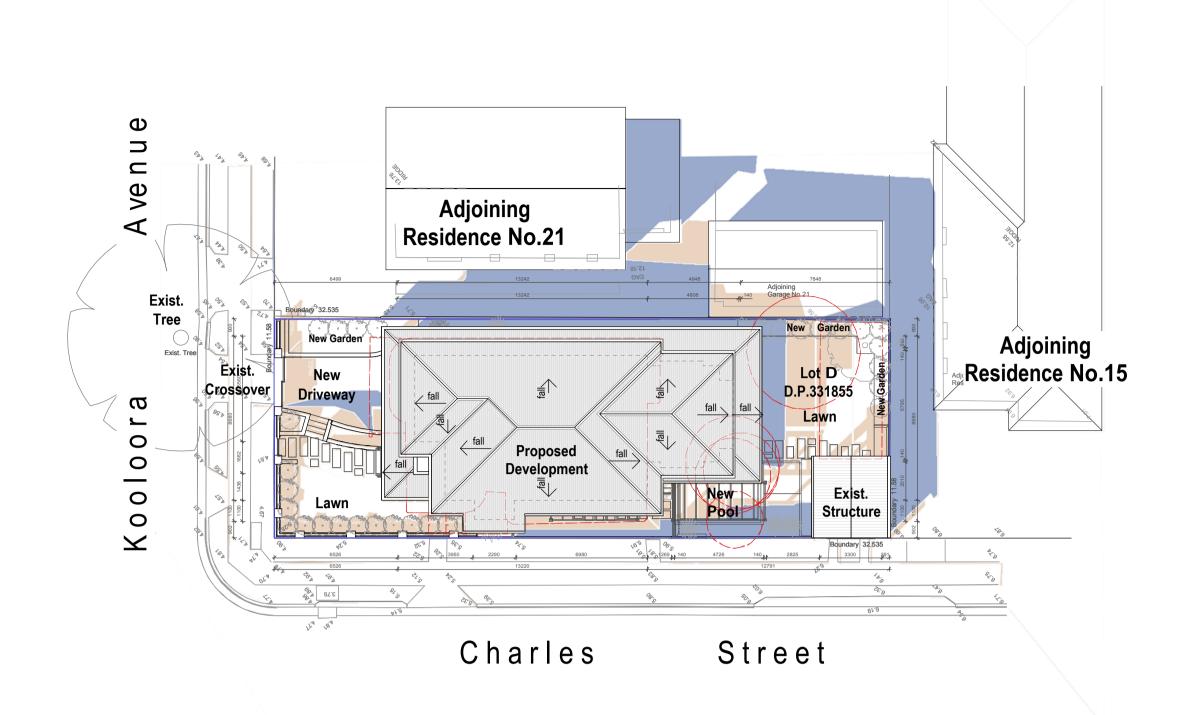


O1 Shadow Diagram for June 21st at 9.00am

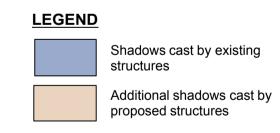


Shadow Diagram for June 21st at 3.00pm

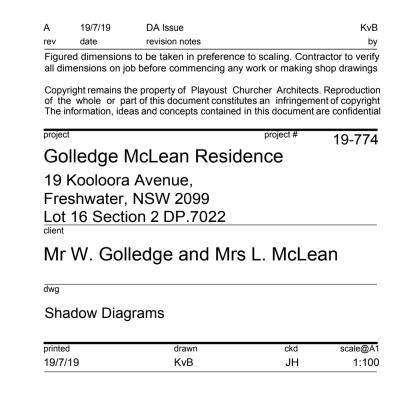
Scale: 1:200



Shadow Diagram for June 21st at 12.00pm

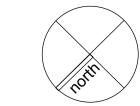


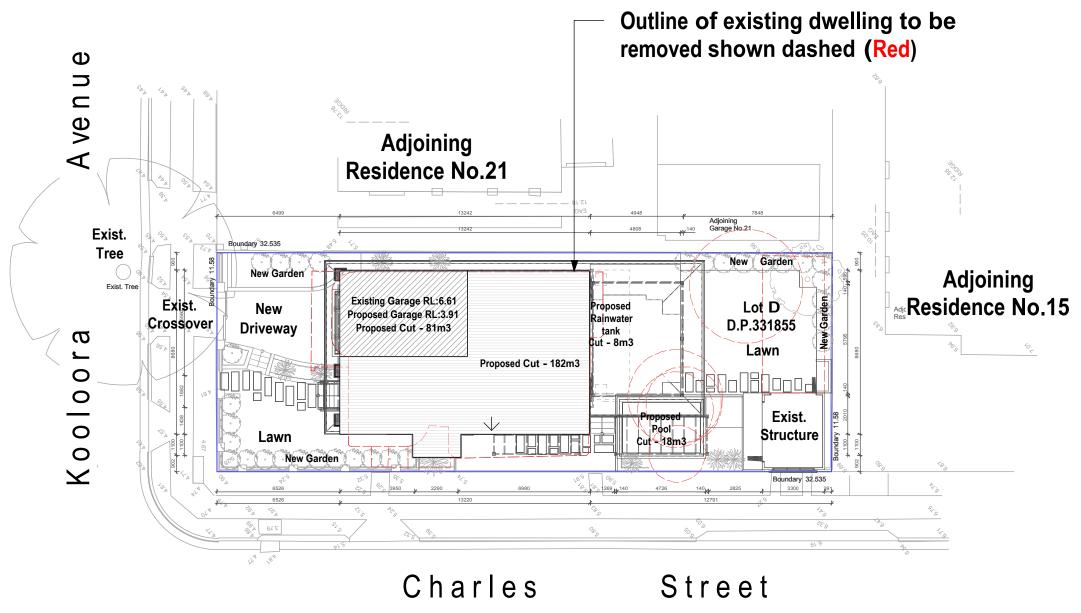
### Preliminary 19.7.2019



DEVELOPMENT APPLICATION







01 Demolition and Excavation Cut and Fill Plan

Scale: 1:200

Proposed cut below existing Garage - 81m3

Proposed cut outside existing Garage - 208m3

Total Cut - 289m3

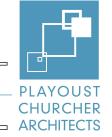


**DA A800** 

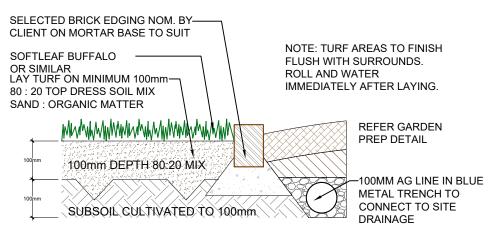
Demolition, Excavation and

Cut / Fill Plan

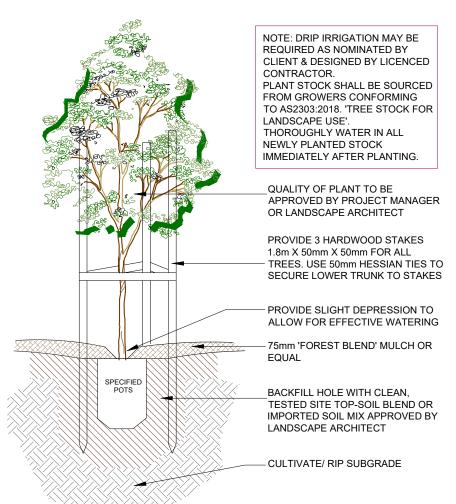
June 2019 KvB NTS sca



<b>Proposed New Residence</b>
19 Kooloora Ave, Freshwater



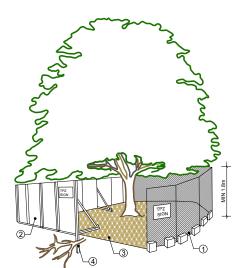
### TYPICAL TURF AND BRICK EDGE DETAIL



### TREE PLANTING DETAIL

SCALE: NTS

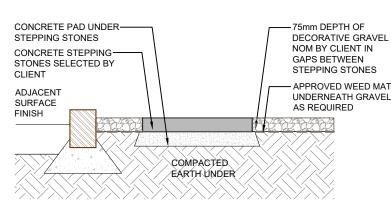
(ONLY APPLICABLE FOR PLANTING AREA OUTSIDE TREE PROTECTION ZONE OF TREES TO BE RETAINED. NO CHANGES ARE TO OCCUR TO EXISTING LEVELS, INCLUDING RIPPING/CULTIVATING OF THE SOIL WITHIN THE TPZ OF TREES TO BE RETAINED ON SITE)



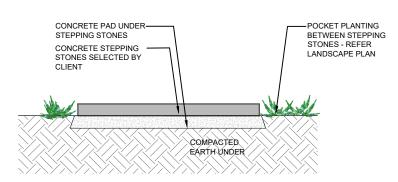
- 1 CHAIN WIRE MESH PANELS WITH SHADE CLOTH (IF REQUIRED) ATTACHED, HELD IN PLACE WITH CONCRETE FEET
- 2. ALTERNATIVE PLYWOOD OR WOODEN PALING FENCE PANELS. THE FENCING MATERIAL ALSO PREVENTS BUILDING MATERIALS OR SOIL ENTERING THE TPZ
- 3. MULCH INSTALLATION ACROSS SURFACE OF TPZ (AT THE DISCRETION OF THE PROJECT ARBORIST). NO EXCAVATION, CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT OR STORAGE OF MATERIALS OF ANY KIND IS PERMITTED WITHIN THE TPZ
- 4 BRACING IS PERMISSIBLE WITHIN THE TPZ. INSTALLATION OF SUPPORTS TO AVOID DAMAGING ROOTS
- 5. PRUNING & MAINTENANCE TO TREE REFER TO AS 4373-2007 PRUNING OF AMENITY TREES

PROVIDE FENCING AS DETAILED TO ALL TREES PROPOSED TO BE RETAINED ON THE SUBJECT SITE FENCING TO BE LOCATED TO THE DRIP LINE OF TREES OR AS INDICATED ON PLANS OR DIRECTED ON-SITE BY ARBORIST. NO STOCKPILING WITHIN FENCE PERIMETERS.

### TREE PROTECTION ZONE



### STEPPING STONES IN GRAVEL



### STEPPING STONES IN GROUNDCOVER **PLANTING SCALE 1:10**

# LAWN/GARDEN EDGE

SPECIFIED

PLANTING 8

POT SIZE

300mm DERTH SOIL MIX BLEND

SUBSOIL CULTIVATED TO 100mm

TYPICAL SETBACK FROM

THIS DETAIL IS ONLY APPLICABLE FOR PLANTING AREA OUTSIDE TREE PROTECTION ZONE OF TREES TO BE RETAINED. NO CHANGES ARE TO OCCUR TO EXISTING LEVELS, INCLUDING RIPPING/CULTIVATING OF THE SOIL WITHIN THE TPZ OF TREES TO BE

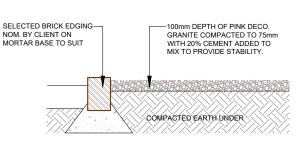
75mm DEPTH "FOREST BLEND" MULCH OR EQUIVALENT

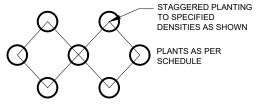
### SOIL MIX:

RETAINED ON SITE

50% OF STOCKPILED SITE TOPSOIL FREE FROM ALL BUILDER'S RUBBISH AND DELETERIOUS MATERIALS. TOPSOIL TO BE MIXED WITH MINIMUM 50% IMPORTED GARDEN MIX OR SOIL CONDITIONER/ COMPOSTED ORGANIC MATTER - SEE SPEC USE 100% IMPORTED SOIL MIX WHEN SITE TOPSOIL RUNS OUT.

### TYPICAL GARDEN PREPARATION DETAIL

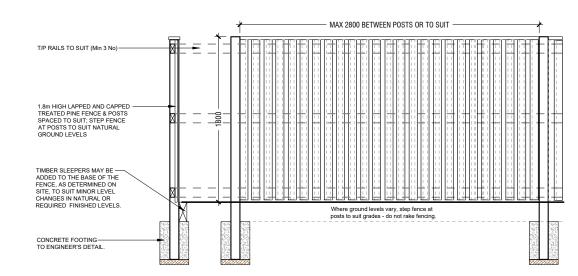




MASS PLANTING SETOUT N.T.S

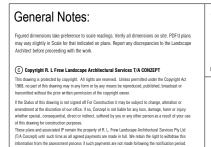
### TYPICAL COMPACTED DECO GRANITE DETAIL

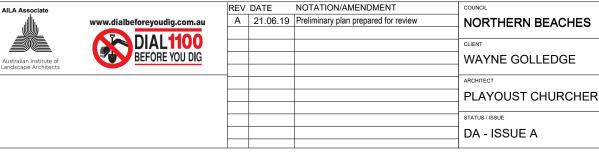
SCALE 1:10



### 1.8m BOUNDARY LAPPED AND CAPPED T/P TIMBER FENCING

SCALE: 1:20







**DETAILS** PROPOSED RESIDENTIAL DEVELOPMENT Lamdscape Architects Suite 101, 506 Miller St **CAMMERAY NSW 2062** 

Phone: 9922 5312

Fax: 8209 4982

19 KOOLOORA AVE FRESHWATER LPDA 19 - 242 / 3 AS SHOWN @ A3 JUNE 2019 R.F R.H

### **PRELIMINARIES**

### 1.01 GENERAL

The following general conditions should be considered prior to the commencement of landscape works:

- The landscape plans should be read in conjunction with the architectural plans, hydraulic plans, service plans and survey prepared for the proposed development.
- All services including existing drainage should be accurately located prior to the commencement of landscape installation. Any proposed tree planting which falls close to services will be relocated on site under the instruction of the landscape architect.
- . Installation of conduit for required irrigation, electrical and other services shall be completed prior to the commencement of hardscape
- All outdoor lighting specified by architect or client to be installed by qualified electrician
- Anomalies that occur in these plans should be brought to our immediate attention.

  Where an Australian Standard applies for any landscape material testing or installation technique, that standard shall be followed.

### 1.02 PROTECTION OF ADJACENT FINISHES

The Contractor shall take all precautions to prevent damage to all or any adjacent finishes by providing adequate protection to these areas / surfaces prior to the commencement of the Works

### 1.03 PROTECTION OF EXISTING TREES

Existing trees identified to be retained shall be done so in accordance with AS 4970-2009 Protection of trees on development sites as well as in accordance with the tree protection measures prepared by project arborist

Where general works are occurring around such trees, or pruning is required, a qualified Arborist shall be engaged to oversee such works and manage tree health.

Existing trees designated on the drawing for retention shall be protected at all times during the construction period. Any soil within the drip-line of existing trees shall be excavated and removed by hand only. No stockpiling shall occur within the root zone of existing trees to be retained.

Any roots larger in diameter than 50mm shall only be severed under instruction by a qualified arborist. Roots smaller than 50mm diameter shall be cut cleanly with a saw.

Temporary fencing shall be installed around the base of all trees to be retained prior to the commencement of landscape works. Where possible this fencing will be located around the drip line of these trees, or a minimum of 3m from the trunk. The fencing shall be maintained for the full construction period.

### 1.04 EROSION & POLLUTION CONTROL

The Contractor shall take all proper precautions to prevent the erosion of soil from the subject site. The contractor shall install erosion & sediment control barriers and as required by council, and maintain these barriers throughout the construction period. Note that the sediment control measures adopted should reflect the soil type and erosion characteristics of the site.

Erosion & pollution control measures shall incorporate the following

- Construction of a sediment trap at the vehicle access point to the subject site.
- Sediment fencing using a geotextile filter fabric in the location indicated on the erosion control plan or as instructed on site by the
- Earth banks to prevent scour of stockpiles
- Straw bale & geotextile sediment filter
- Exposed banks shall be pegged with an approved Jute matting in preparation for mass planting

Refer to 'Guidelines for Erosion and Sediment Control on Building Sites' by DLWC (2000) for construction techniques

### SOIL WORKS

### 2.01 MATERIALS

### Specified Soil Conditioner (Generally to improve site soil)

The specified soil conditioner for site top-soil improvement shall be an organic mix complies with AS 4454-2012 Composts, soil conditioners and mulches. Note that for sites where soil testing indicates toxins or extremes in pH, or soils that are extremely poor, allow to excavate and supply 300mm of imported soil mix.

### New gardens & proposed Planting

New garden and planting areas shall consist of a 50/50 mix of clean site soil (refer d) below) and imported soil. All mixes are to comply with AS4419-2003 Soils for Landscaping and garden use, & AS 4454 Composts, Soil conditioners & mulches.

The specified soil mix for all turf areas shall be a min 75mm layer of imported soil mix consisting of 80% washed river sand (reasonably coarse), and 20% composted organic matter equivalent to mushroom compost or soil conditioner, or other approved lawn top dress.

Site Topsoi

Site topsoil is to be clean and free of unwanted matter such as gravel, clay lumps, grass, weeds, tree roots, sticks, rubbish and plastics, and any deleterious materials and materials toxic to plants. The topsoil must have a pH of between 5.5 and 7. Use 100% imported soil mix when site when site topsoil runs out.

### 2.02 INSTALLATION

### Note: No level changes (Cut or Fill), soil ripping within the Tree Protection Zones of trees to be retained

### Testing

All testing is to be conducted in accordance with AS4419-2003 Soils for Landscaping and garden use Methods for testing soils for engineering purposes. Site soil shall be given a pH test prior to modifying to ensure conditions are appropriate for planting as stated above. Tests shall be taken in several areas where planting is proposed, and the pH shall be adjusted accordingly with sulphur or lime to suit

Note that a soil test conducted by the Sydney Environmental & Soil Laboratory or approved equal shall be prepared for all commercial.

### Set Out of Individual Trees & Mass Planting Areas

All individual tree planting positions and areas designated for mass planting shall be set out with stakes or another form of marking, ready for inspection and approval. Locate all services.

### c) Establishing Subgrade Levels

Subgrade levels are defined as the finished base levels prior to the placement of the specified material (i.e. soil conditioner). The following subgrade levels shall apply Mass Planting Beds - 300mm below existing levels with specified imported soil mix.

Turf areas - 100mm below finished surface level

Note that all subgrades shall consist of a relatively free draining natural material, consisting of site topsoil placed previously by the Civil Contractor. No builders waste material shall be acceptable

Cultivate all subgrades to a minimum depth of 100mm in all planting beds and all turf areas, ensuring a thorough breakup of the subgrade into a reasonably coarse tilth. Grade subgrades to provide falls to surface and subsurface drains, prior to the placement of the final specified soil

e) Drainage Works
Install surface and subsurface drainage where required and as detailed on the drawing. Drain subsurface drains to outlets provided, with a minimum fall of 1:100 to outlets and / or service pits.

### Placement and Preparation of Specified Soil Conditioner & Mixes.

- Trees in turf & beds Holes shall be twice as wide as root ball and minimum 100mm deeper backfill hole with 50/50 mix of clean site
- soil and imported "Organic Garden Mix" as supplied by ANL or approved equa Mass Planting Beds - Install specified soil conditioner to a compacted depth of 100mm

Place the specified soil conditioner to the required compacted depth and use a rotary hoe to thoroughly mix the conditioner into the top 300mm of garden bed soil. Ensure thorough mixing and the preparation of a reasonably fine tilth and good growing medium in preparation for planting.

Turf Areas - Install specified soil mix to a minimum compacted depth of 75mm.

Place the specified soil mix to the required compacted depth and grade to required finished soil levels, in preparation for planting and turfing.

### PLANTING

### 3.01 MATERIALS

### Quality and Size of Plant Material

All trees supplied above a 25L container size must be grown and planted in accordance with AS 2303:2018 use. Certification that trees have been grown to AS2303:2018 guidelines is to be provided upon request of Council's Tree Management

The following plant quality assessment criteria should be followed:

Plant true to type, Good vigour and health, free from pest & disease, free from injury, self-supporting, good stem taper, has been pruned correctly, is apically dominant, has even crown symmetry, free from included bark & stem junctions, even trunk position in pot, good stem structure

Good root division & direction, rootball occupancy, rootball depth, height of crown, non-suckering For further explanation and description of these assessment criteria, refer to AS2303:2018

All Plant material shall be to the type and size specified. No substitutions of plant material shall be permitted without written prior approval by the Landscape Architect. No plant shall be accepted which does not conform to the standards listed above

Provide min. 3 No. Stakes and ties to all plants identified as trees in the plant schedule. Stakes shall be sound, unpainted, straight hardwood, free of knots and pointed at one end. They shall be 2200mm x 50mm x 50mm Hardwood, or approved alternative. Ties shall be 50mm wide

Fertilisers shall be approved slow release fertilisers suitable for the proposed planting types. Note that for native plants, specifically Proteaceae family plants including Grevillea species, low phosphorus fertilizers shall be used.

d) Mulch
Mulch shall be an approved equal to "Forest Blend" as supplied by ANL. Mulch shall be completely free from any soil, weeds, rubbish or other

Turf shall be soft leaf Buffalo or equivalent (unless stated otherwise), free from any weeds and other grasses, and be in a healthy growing

### 3.02 INSTALLATION

### Setting Out

All planting set out shall be in strict accordance with the drawings, or as directed. Note that proposed tree planting located near services should be adjusted at this stage. Notify Landscape Architect for inspection for approval prior to planting.

All plant material shall be planted as soon after delivery as possible. Planting holes for trees shall be excavated as detailed and specified. Plant containers shall be removed and discarded, and the outer roots gently teased from the soil mass. Immediately set plant in hole and backfill with specified soil mix, incorporating the approved quantity of fertiliser for each plant type. Ensure that plants are set plumb vertically and root balls set to the consolidated finished grades detailed on the drawings. Compact the backfilled soil and saturate by hand watering to expel any remaining

c) Staking and Tying
Staking and tying shall be in strict accordance with the drawings and shall occur immediately following plant placement and soil backfilling. All plants identified as "Trees" on the planting schedule shall be staked with a min. 3 stakes.

Mulch for general planter bed shall be an approved equal to "Forest Blend" as supplied by ANL. Mulch shall be completely free from any soil. weeds, rubbish or other debris. Mulch for bio-retention/rain garden area where is required shall be non-floatable materials that could include crushed rock, gravel, coarse river sand, scoria or river pebbles. 4-7mm screenings or similar.

Moisten soil prior to the turf being laid. Turf shall be neatly butt jointed and true to grade to finish flush with adjacent surfaces. Incorporate a lawn fertilizer and thoroughly water in. Keep turf moist until roots have taken and sods/rolls cannot be lifted. Keep all traffic off turf until this has occurred. Allow for top dressing of all turf areas. All turf shall be rolled immediately following installation.

f) Brick garden edging
Where is required, the Contractor shall install brick garden edging as detailed on the drawings, to all mass planting beds adjoining turf or gravel mulched areas, and where required. The resultant edge shall be true to line and flush with adjacent surfaces. However, no edging shall be used within the Structural Root Zone (SRZ) of trees to be retained.

### Nature Strip and public domain works

The nature strip (street frontage) for the site is public land, and only authorized works may occur here

REV DATE

Existing Conditions such as street trees, council planting etc shall be retained and protected during construction, unless specific approval has been granted for new work in this area. Where council policy specifies a particular unit paver, material finish, pattern or treatment, it shall be the contractors responsibility to check and verify that this material & treatment is correct and current prior to undertaking construction works'

NOTATION/AMENDMENT

A 21.06.19 Preliminary plan prepared for review

### HARDSCAPE WORKS

### 4.01 GENERAL

The Contractor shall undertake the installation of all hardscape works as detailed on the drawing, or where not detailed, by manufacturers

Paving - refer to typical details provided, and applicable Australian Standards. Permeable paving may be used as a suitable means of satisfying Council permeable surface requirements, while providing a useable, hardwearing, practical surface. In most instances, the client shall nominate the appropriate paving material to be used.

Australian Standards shall be adhered to in relation to all concrete, masonry & metal work. Some details are typical and may vary on site. All

hardscape works shall be setout as per the drawings, and inspected and approved by the Landscape Architect prior to installation. All workmanship shall be of the highest standard. Any queries or problems that arise from hardscape variations should be bought to the attention of

Your attention is directed to any obligations or responsibilities under the Dividing Fences Act, 1991 in respect of adjoining property owner/s which may arise from this application. Any enquiries in this regard may be made to the Crown Lands on 1300 886 235

### IRRIGATION WORKS

### 5.01 GENERAL (PERFORMANCE SPECIFICATION)

This is a general Irrigation Performance Specification only, as a guide for projects requiring irrigation systems as part of consent requirements or building contractual arrangements.

An automated irrigation system is recommended for the effective establishment of new gardens, and to assist with the success of planting areas on terraces, over slabs and in Communal Open Spaces.

The inclusion of this general specification is no guarantee that an irrigation system forms part of the landscape scope of works, which will be

New irrigation systems to planting areas shall be a Commercial Grade Irrigation System conforming to all relevant Australian standards, including AS 3500 & the Gas and Electricity (Consumer Safety) Act 2017, Workplace Health & Safety Act 2011, & the latest Sydney Water Code

An automated drip-irrigation system is to be installed to all gardens, planters and lawn areas in accordance with the approved Irrigation Design. This system shall be designed and installed by a qualified and licensed irrigation specialist, to the highest industry standards and to maximise the efficient usage of water.

The Installer is required to obtain all approvals necessary for the completion of works in accordance with the Laws of Australia, Laws of the State of NSW, Northern Beaches Council By-Laws and Ordinances.

<u>Drawings:</u>
- The Landscape Contractor nominated Licensed Irrigation Specialist shall provide irrigation drawings for approval upon engagement.

### **Design Requirements:**

The irrigation system shall be installed prior to all planting works. It shall incorporate a commercially available irrigation system, with

sub-surface dripper lines to irrigate all gardens, planters and lawn areas.

- It shall incorporate a suitable back flow prevention device for the scale of works, an in-line filter, check valves, and suitable high and low density poly hose fittings and PVC piping to achieve flow rates suitable for specified planting.

The irrigation application rate shall not exceed the infiltration rate of the soil or creates run-off.

The landscape contractor shall check the existing pressure available from the ring mains and size irrigation piping to suit. Supply shall be from local hose cock where available

All piping and fittings shall be buried 50mm below the finished soil levels in garden and lawn areas, and secured in position at 500mm centres with galv wire pins

Size of pipes shall be selected to ensure the working pressure at the end of the line does not decrease by more than 5%.

### Services Co-ordination:

- Co-ordination required by Landscape Contractor or Project Manager to provide required conduit, pipe work and penetration through slabs and planter walls for water and power provisions.

The Landscape Contractor shall be engaged with the Irrigation Specialist to co-ordinate with the Project Manager to identify the preferred service and conduit locations.

- Project Manager and Landscape Contractor to establish area suitable for irrigation control system with required area, power provision and

Testing & Defects:
Upon completion of installation, the system shall be tested, including

Main Line Pressure Test: The main line is pressurised to test for leaks. All valves are shut and the pressure is taken over a determined lenath of time.

- Dripper Pressure Test: Measurement at flushing valves are taken and the pressure gauged to make sure it conforms to the manufacturer recommendations. The inlet pressure is then tested under the same conditions to check it does not exceed 300Kpa.

All components are to be satisfactorily functional and operational prior to approval. Should any defect develop, or the capacity or efficiency of the system decline during the agreed maintenance system, then these faults shall be immediately rectified

Warranty:
- A full 12 month warranty shall be included to cover labour and all parts.

### Further Documentation: - On request, a detailed irrigation performance specification report can be issued.

### CONSOLIDATION AND MAINTENANCE 6.01 GENERAL

The consolidation and maintenance period shall be 12 months beginning from the approved completion of the specified construction work (Practical Completion). A qualified landscape maintenance contractor shall undertake the required landscape maintenance works. Consolidation and maintenance shall mean the care and maintenance of Contracted works by accepted landscaping or horticultural practices, ensuring that all plants are in optimum growing conditions and appearance at all times, as well as rectifying any defects that become apparent in the contracted

This shall include, but not be limited to, the following items where and as required:

- Watering all planting and lawn areas / irrigation maintenance Clearing litter and other debris from landscaped areas.
- Removing weeds, pruning and general plant maintenance
- Replacement of damaged, stolen or unhealthy plants.
  Make good areas of soil subsidence or erosion.
- Topping up of mulched areas. Spray / treatment for Insect and disease control.
- Fertilizing with approved fertilizers at correct rates. Mowing lawns & trimming edges each 14 days in summer or 18 days in winter

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**NORTHERN BEACHES** 

Maintenance of all paving, retaining and hardscape elements

On the completion of the maintenance period, the landscape works shall be inspected and at the satisfaction of the superintendent or landscape architect, the responsibility will be signed over to the client.

**SPECIFICATIONS** 

### General Notes:

rayures amensions take preference to scale readings. Verify all dimensions on site. POF of plans, may vary slightly in Scale for that indicated on plans. Report any discrepancies to the Landscape Architect before proceeding with the work.

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LPDA 19 - 242 / 4 NTS @ A3 **JUNE 2019** 

**FRESHWATER** 

R.F R.H