

**LEGEND**

- RL + 10.000 PROPOSED LEVEL
- BOUNDARY
- BASEMENT OUTLINE
- PROPOSED CONCRETE VEHICLE CROSSING
- PROPOSED CONCRETE DRIVEWAY
- EXISTING CONCRETE PAVING
- PROPOSED PAVED AREA TYPE 1
- PROPOSED PAVED AREA TYPE 2
- PROPOSED TIMBER DECK
- PROPOSED WALL REFER TO ARCHITECT'S DETAIL
- EXISTING TREE TO BE RETAINED

**PLANT SCHEDULE**

Latin Name	Common Name	Quantity	Scheduled Size	Spread	Height
Acmena smithii 'Minor'	Lillypilly	26	200mm	1000	2000
Banksia serrata	Old Man Banksia	1	75Lt	2500	3000
Banksia spinulosa	Hairpin Banksia	4	200mm	1200	600
Carpobrotus glaucescens	Pirface	14	200mm	600	200
Correa alba	Correa alba	6	200mm	1000	1500
Dianella caerulea	Blue Flax Lily	59	200mm	700	700
Dianella revoluta	Mauve Flax Lily	45	200mm	500	500
Dodonea triquetra	Hop Bush	6	200mm	1200	3000
Doryanthes excelsa	Gymea Lily	2	15Lt	1500	1500
Ficinea nodosa	Knobby Club Rush	62	200mm	600	800
Hardenbergia violacea	Flase Sarsparilla	12	200mm	800	400
Hibbertia scandens	Climbing Guinea Flower	5	200mm	800	350
Juncus usitatus	Common Rush	79	200mm	500	600
Lomandra longifolia	Native Grass	8	200mm	900	900
Magnolia 'Little Gem'	Magnolia	2	75Lt	2500	3000
Murraya paniculata	Orange Jessamine	15	200mm	1200	2500
Scaevola aemula	Scaevola	22	200mm	500	300
Syzygium australe 'Resilience'	Lillypilly	15	200mm	1200	3000
Themeda australis	Kangaroo Grass	98	200mm	900	900
Trachelospermum asiaticum	Jasmine	59	200mm	800	300
Tristianiopsis laurina	Water Gum	1	75Lt	4000	7000

**PLANT PALETTE**



**PROJECT** PROPOSED LANDSCAPE PLAN

**ADDRESS** 51 JAMISON STREET, KINGSWOOD

DATE	29/03/2019	REVISION	D
SCALE	1:100 @ A1 1:200 @ A3	DRAWN	BV
PROJECT	LIQUID DESIGN	CHECKED	EA

**SHEET** L01

**DEVELOPMENT** PROPOSED BOARDING HOUSE

**ARCHITECT** LIQUID DESIGN

**NOTES**

- All dimensions, levels and boundaries are nominal only and shall be verified by Contractor on site prior to commencement of work.
- All detailing of drainage to paved areas shall be by others.
- All levels shall be determined on site by others and approved on site by client.
- Retaining wall heights, extents and positions shall be determined on site by others and approved by client to Structural Engineer's detail.
- Do not scale from drawings.
- If any discrepancies occur, please contact the Landscape Architect.
- Before commencement of construction works, all boundaries shall be surveyed.
- This design shall not be reproduced or copied in any form or by any means of graphic, electronic or mechanical without the written permission of B + E Landscape Architects.

REVISION	DESCRIPTION	DATE	REVISION	DESCRIPTION	DATE
A	PRELIMINARY REVIEW	05/11/17			
B	UPDATED ARCHITECTURAL PLANS	14/12/17			
C	FOR SUBMISSION	25/01/18			
D	ARCHITECTURAL CHANGES	29/03/19			

# LANDSCAPE DETAILS

# OUTLINE SPECIFICATION

## PRELIMINARIES/ 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 landscape works and hardstand pours. 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.

## 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.

## 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 fiber fabric in the location indicated on the erosion control plan or as instructed on site by the landscape architect, earth berms to prevent scour of stockpile, sandbag kerb sediment traps, straw bale & geotextile sediment filter, exposed berms shall be pegged with an approved jute matting in preparation for mass planting.

## SOIL WORKS/PLANTING

Planting Mix: Planting mix for tree pit backfill shall be "Organic Garden Mix" consisting of 50% Black Soil 20% Coarse Sand 30% Organic Material as available from Australian Native Landscapes, Phone: (02) 9450 1444 or approved equivalent. Samples shall be provided to the Superintendent prior to ordering or delivery to site. Any material delivered to site, that is rejected by the Superintendent shall be removed by the contractor at his own expense. Minimum depths of mix to all planting bed areas is as specified on details.

Mulch to garden bed: Mulch to planter beds shall be graded 'pinebark' mulch, free from fines and is available from Australian Native Landscapes Pty Ltd Phone (02) 9450 1444 or approved equivalent. Spread mulch so that after settling it is smooth and evenly graded between design surface levels. Flush with adjacent finished levels of the required depths (75mm); and sloped towards the base of plant stems in plantation beds, but not in contact with the stem (not closer than 50mm in the case of gravel mulches). Place after the preparation of the garden bed, planting and all other work.

Plant Material: All plant material must be true to the species. No substitutes will be allowed. All plants shall be free of fungus and insect damage. All plants shall be healthy, well shaped, not soft or force grown and not root bound.

Timber Edging: Timber edging shall be 100 x 25mm H treated timber, edge board fastened to pegs with galvanized steel nails.

Treated timber pegs to be 40 x 40 x 450mm at max. 1200mm centre.

Stakes: Trees in 2 x 50-50 to 100mm Hardwood Stake with double Nylon tie. Staking Use durable hardwood, straight, free from knots or twists, pointed at one end. Drive stakes into the ground a minimum one third of their length, avoiding damage to the root system.

Ties: Provide a 50mm wide Nylon webbing tie per stake, fixed securely to the stakes, one tie at half the height of the main stem and the other as necessary to stabilise the plant.

Lawn Areas: All new turf areas are to be selected weed free Soft Leaf Buffalo. Turf shall be laid neatly butted with staggered joints, flush with adjacent surfaces and have even running falls to all drainage points. All new turf area shall have a minimum 150mm depth of weed free top soil placed and leveled prior to turfing.

## RETAINING WALLS

Details of retaining walls, position, materials and structural engineering by others.

## CLOTHESLINE

Clothesline shall be positioned as shown on the plan, install as per manufacturer's details to Landscape Architect's approval.

## PAVING

Paving area to be filled of excavated as falls and levels of the plan. Stormwater system to be installed by builder with Surface drainage on paving towards grated drains with all drains connected to stormwater system.

## FENCING

Fencing to be retained unless advised by others. Refer to landscape plan.

## IRRIGATION SYSTEM AND REQUIREMENTS DESCRIPTION OF WORKS

The scope of works in this section comprises the design and specification (for comment by Superintendent), supply and installation of fully automated commercial drip irrigation system to all landscaped areas and to Council's requirements. The general location and extent of the areas to be irrigated is as shown on plans and includes: i) Planter bed areas to be irrigated by "Techline" dripline at 750mm intervals, capable of delivering 20mm / week; ii) Garden bed areas to be irrigated by "Techline" dripline at 750mm intervals, capable of delivering 20mm / week; iii) Turf areas to be irrigated by "Uniram" dripline at 500mm intervals, capable of delivering 30mm / week. The Contractor shall provide shop drawings and materials and equipment specifications for comment by the Superintendent. Not with standing comments on the irrigation design being provided by the Superintendent responsibility for the technical design, operation and adequacy of performance of the irrigation system will remain with the Contractor.

## PROTECTION OF EXISTING TREES

Existing trees identified to be retained shall be done so in accordance with a qualified 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.

## FEES, PERMITS AND APPROVALS

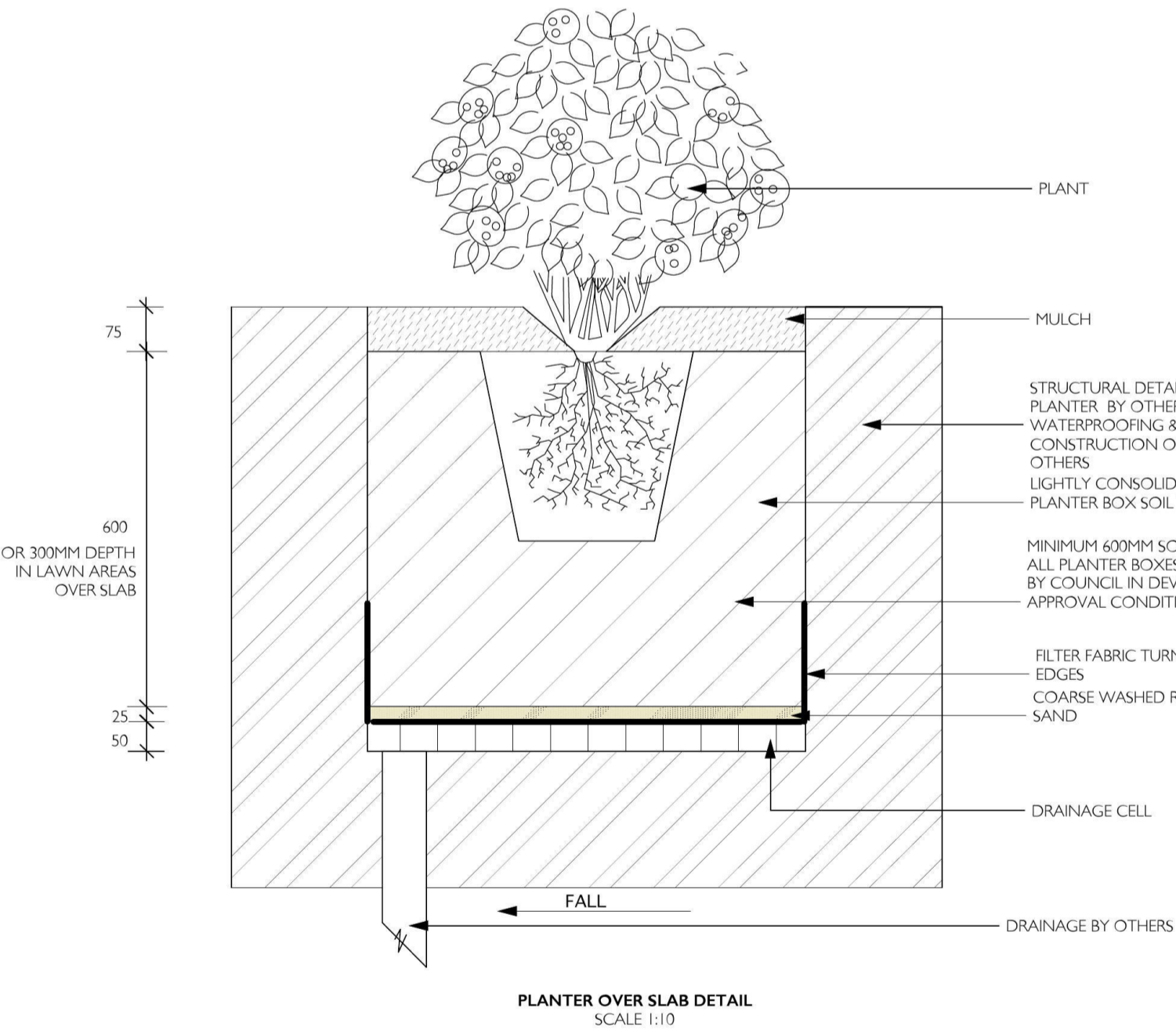
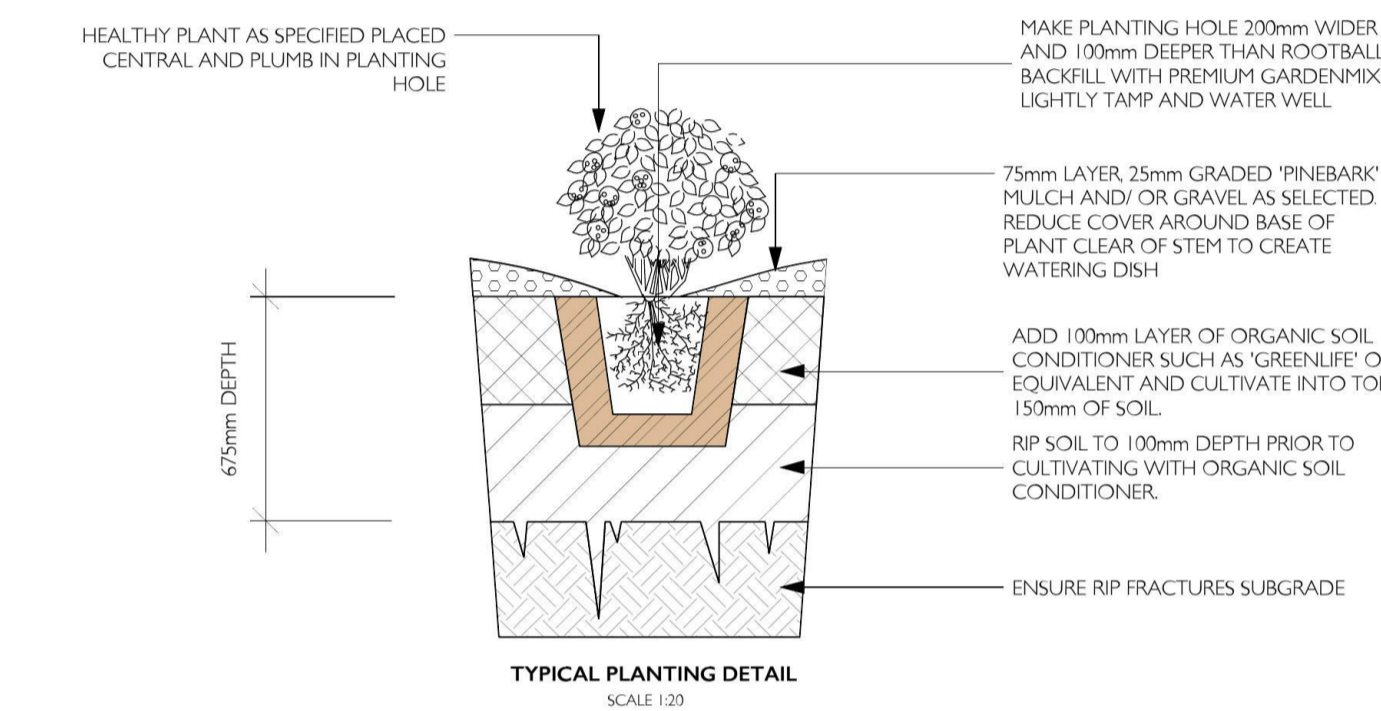
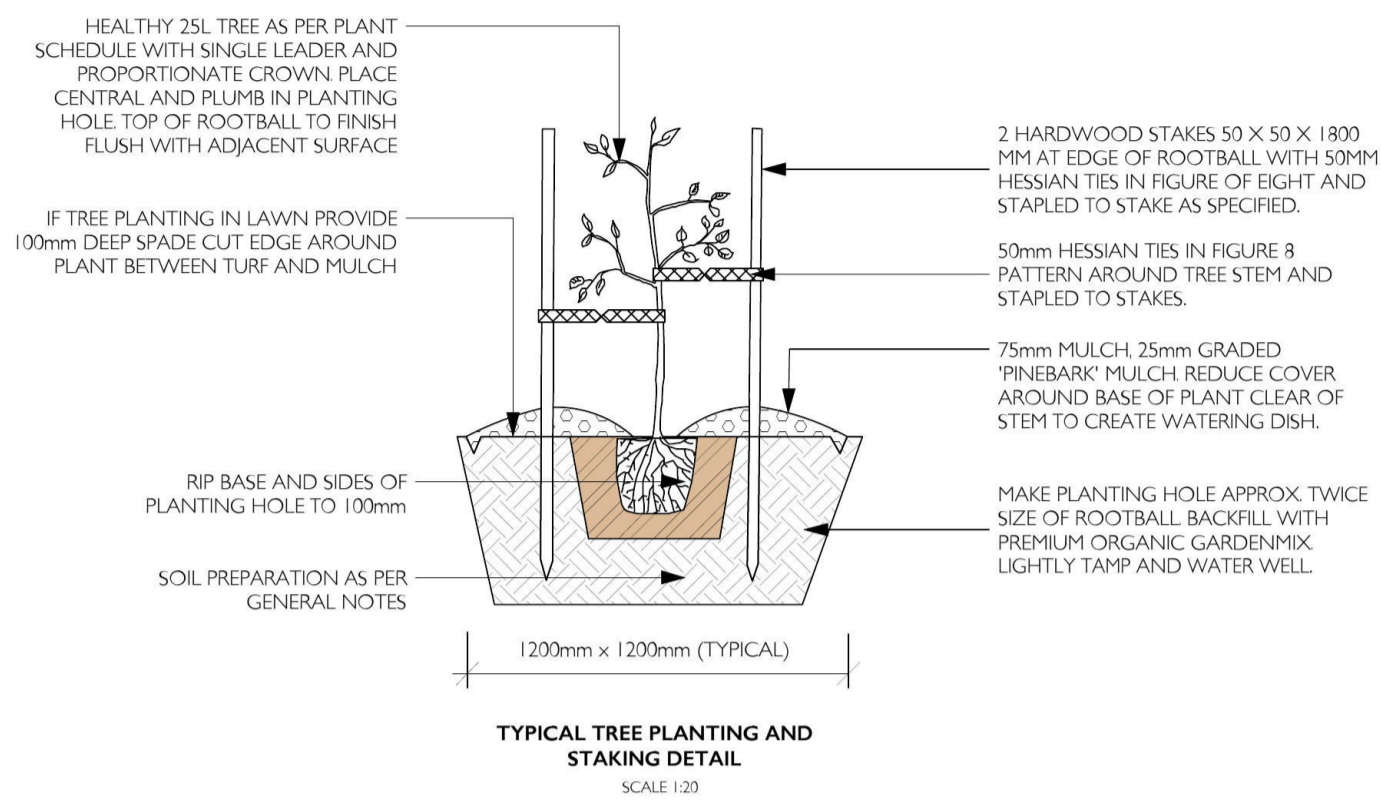
The Contractor shall be responsible for securing all necessary inspections and approvals. Before commencement of any works on the site the Contractor shall obtain approval from the Superintendent for the works to proceed and submit the necessary notification forms to all authorities having jurisdiction. These shall include but are not limited to the following: Connection Fees & Inspection Fees, Water Authority Document Inspection Fees, Water Authority Service Connection Charges, Water Authority. The Contractor shall pay all fees, permits, royalties, deposits and charges and shall produce documentary evidence to the Superintendent upon request.

## EXISTING FACILITIES, UTILITIES AND SERVICES

The Contractor's attention is drawn to the existence of utility services within the works site. The Contractor shall be fully responsible for ascertaining exact locations and levels of services or consumer mains which may be encountered during the course of the works. The Contractor shall liaise and consult with services authorities as required during the course of the project. Any damage to services or infrastructure facilities caused by any actions of the Contractor shall be repaired entirely to the satisfaction of the owner of such services and costs incurred shall be borne solely by the Contractor. When a service must be interrupted to enable the carrying out of works under this contract such interruption shall be at a time agreed with the responsible authority or owner and the Superintendent. The Contractor shall organise and be responsible for all necessary notifications and approvals required. Costs of relocation, diversion, temporary removal and replacement of any service shall be borne by the Contractor.

## MAINTENANCE / PLANT ESTABLISHMENT

Maintenance shall apply to all hard and soft landscape materials installed prior to the "handover" and acceptance by Principals Representative and the Site Superintendent. The maintenance period shall commence at the granting of practical completion and shall extend for 26 weeks. Maintenance shall consist of the following works: Follow a daily watering programme to be approved by Superintendent. Water all plants individually twice per week or when necessary to ensure constant plant growth. Water all turf and native grassed areas, twice per week. Apply appropriate weed control sprays and hand weed as required to maintain planting areas, native grassing bed areas, turf areas, paved areas, and tree pits in turf free of weed or rogue grass growth. Regularly tidy and top up mulch and trim edges to prevent spill over onto paved / grassed areas. Spray to control pests and diseases. Replace plants, which fail with plants of a similar size and quality as originally specified to approval of Superintendent. Costs of replacement shall be the responsibility of the Contractor. Replacement planting will be undertaken within 2 weeks of identification of dead material or instruction by the Superintendent. Report any incidence of plants stolen or destroyed by vandalism. Adjust stakes and ties to plants as necessary. Ensure that strangulation of plants does not occur. Prune and shape plants as directed or where necessary. Make good any defects or faults arising out of defective workmanship or materials. Fertilise lawn areas to maintain healthy growth. Make good any erosion or soil subsidence, which may occur including soft areas in pathways. Mow lawn to maintain neat healthy growth. A final inspection shall be made by the Superintendent before handover. Any items requiring rectification shall be repaired before the works are finally approved and retention monies released.

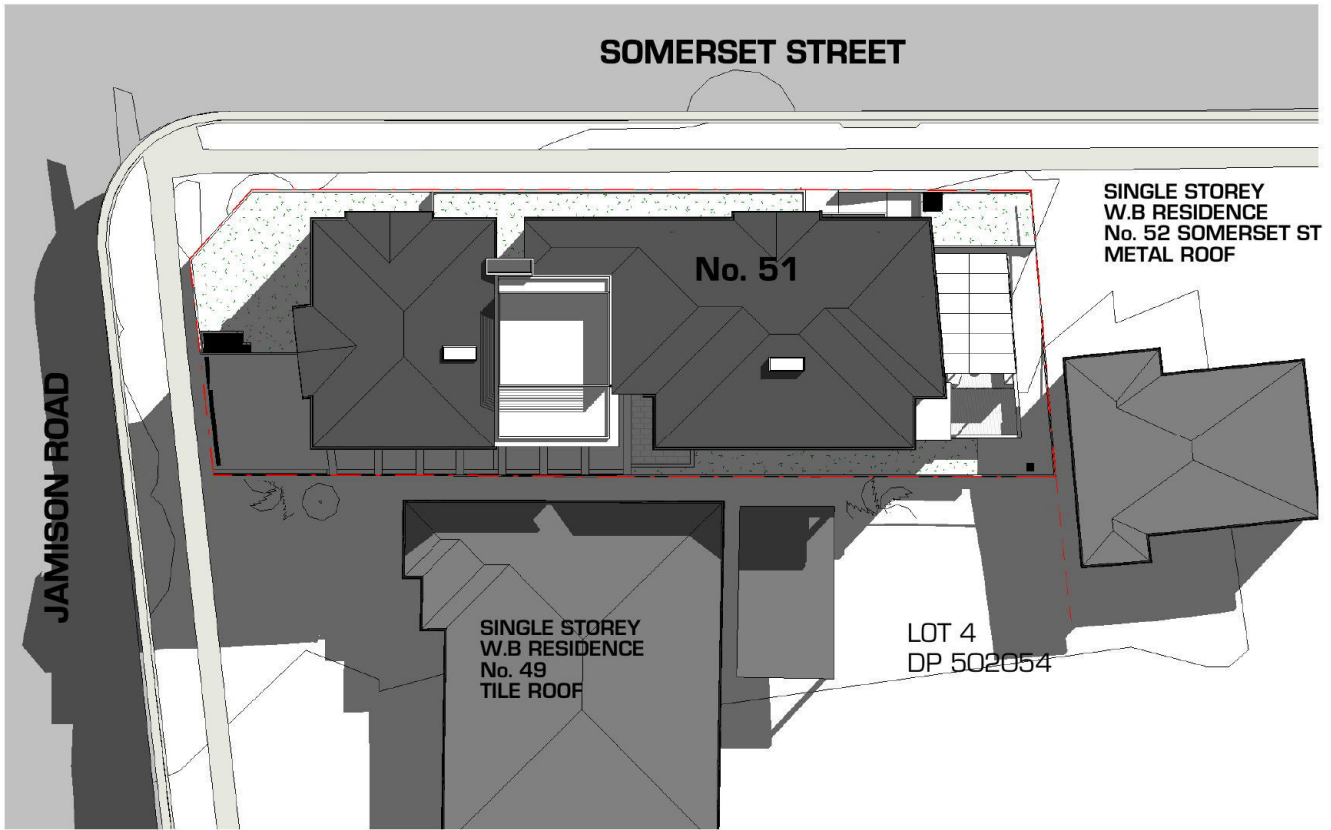


<b>PROJECT</b> LANDSCAPE DETAILS & SPECIFICATION		<b>DEVELOPMENT</b> PROPOSED BOARDING HOUSE	
<b>ADDRESS</b> 51 JAMISON STREET, KINGSWOOD		<b>ARCHITECT</b> LIQUID DESIGN	
<b>DATE</b> 03/04/2019	<b>REVISION</b> B	<b>SHEET</b> L02	
<b>SCALE</b> REFER TO SCALE	<b>DRAWN</b> BV		
<b>PROJECT</b> LIQUID DESIGN	<b>CHECKED</b> EA		

REVISION	DESCRIPTION	DATE	REVISION	DESCRIPTION	DATE
A	FOR SUBMISSION	25/01/18			
B	FOR RESUBMISSION	03/04/19			

**NOTES**

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**SITE PLAN**



**VIEW FROM CNR OF JAMISON & SOMERSET**

**L I Q U I D** | **D**  
D E S I G N

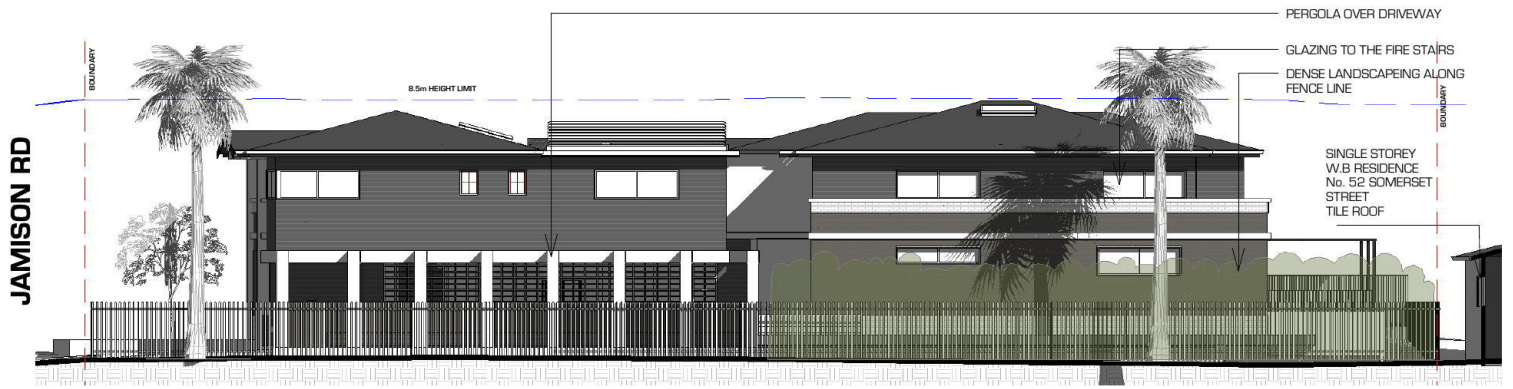
ARCHITECTURE & INTERIOR DESIGN  
SUITE 107, 56 BOWMAN STREET PYRMONT NSW 2009

E: info@liquidesign.com.au | W: liquidesign.com.au | ABN: 89 009 852 017  
NOMINATED ARCHITECT CHRIS BOWMAN-DIERE #8123

Document Set ID: 8660922

Version: 1, Version Date: 16/04/2019

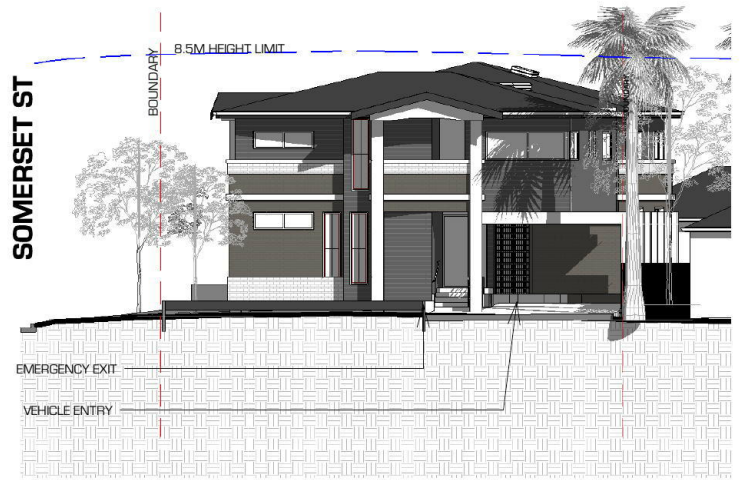
PROJECT <b>PROPOSED BOARDING HOUSE</b>	DRAWN BY <b>CB</b>	PROJECT NUMBER <b>3329</b>	
	DATE	SHEET NUMBER <b>A9900</b>	
TITLE <b>NOTIFICATION PLAN 001</b>	SCALE @ A1 <b>1 : 400</b>	ISSUE	REVISION
<small>It is intended that the drawings only represent the visual design of the work and any technical details are for outline purposes only. The contractor/manufacturer must separately provide all necessary shop drawings or calculations for compliance with any relevant industry, safety standards or regulations. All dimensions are to be checked on site and any discrepancies are to be referred to Liquid Design Pty Ltd in writing prior to proceeding. Dimensioned drawings are to take precedence over scaling. Check for latest revision issue. ©Copyright of this drawing is vested with Liquid Design Pty Ltd.</small>			



**EAST ELEVATION**



**NORTH ELEVATION**



**SOUTH ELEVATION (JAMISON RD)**



**WEST ELEVATION (SOMERSET ST)**

**L I Q U I D** | **D**  
D E S I G N

ARCHITECTURE & INTERIOR DESIGN  
SUITE 107, 56 BOWMAN STREET PYRMONT NSW 2009

E: info@liquidesign.com.au | W: liquidesign.com.au | ABN: 89 009 852 017  
NOMINATED ARCHITECT CHRIS BOWMAN AHPRE #8123

Document Set ID: 8660322

Version: 1, Version Date: 16/04/2019

PROJECT <b>PROPOSED BOARDING HOUSE</b>	DRAWN BY <b>CB</b>	PROJECT NUMBER <b>3329</b>	
	DATE	SHEET NUMBER <b>A9901</b>	
TITLE <b>NOTIFICATION PLAN 002</b>	SCALE @ A1 <b>1 : 250</b>	ISSUE	REVISION
<small>It is intended that the drawings only represent the visual design of the work and any technical details are for outline purposes only. The contractor/manufacturer must separately provide all necessary shop drawings or calculations for compliance with any relevant industry, safety standards or regulations. All dimensions are to be checked on site and any discrepancies are to be referred to Liquid Design Pty Ltd in writing prior to proceeding. Dimensioned drawings are to take precedence over scaling. Check for latest revision issue. ©Copyright of this drawing is vested with Liquid Design Pty Ltd.</small>			

**NOTE:**

THIS DETAIL SURVEY IS NOT A "LAND SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT, 2002. IF ANY CONSTRUCTION OR DESIGN WORK, WHICH RELIES ON CRITICAL SETBACKS FROM THE STREET OR BOUNDARIES IS PLANNED, IT WOULD BE IMPERATIVE TO CARRY OUT FURTHER SURVEY WORK TO DETERMINE THE BOUNDARY DIMENSIONS.

PRIOR TO ANY CONSTRUCTION WORK, SURVEY MARKS SHOULD BE PLACED TO DEFINE THE PROPERTY BOUNDARIES.

SERVICES SHOWN ARE INDICATIVE ONLY. POSITIONS ARE BASED ON SURFACE INDICATOR(S) LOCATED DURING FIELD SURVEY. CONFIRMATION OF THE EXACT POSITION SHOULD BE MADE PRIOR TO ANY EXCAVATION WORK. OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN.

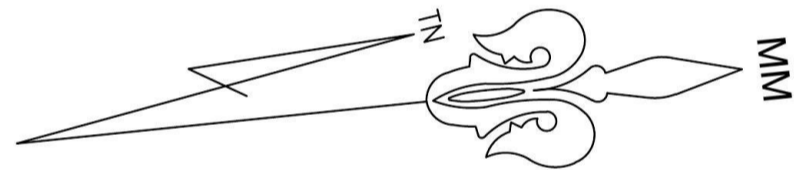
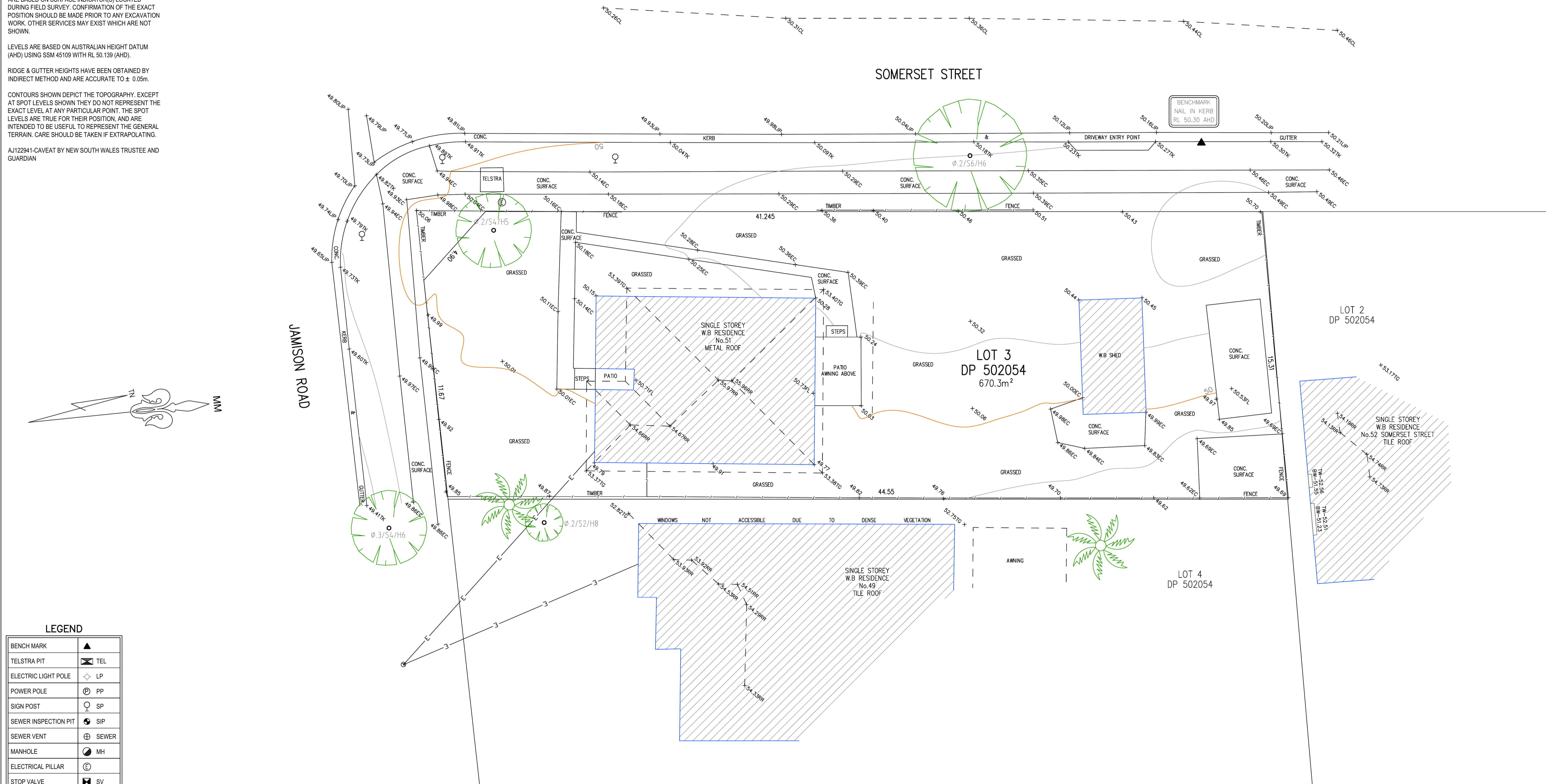
LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD) USING SSM 45109 WITH RL 50.139 (AHD).

RIDGE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05m.

CONTOURS SHOWN DEPICT THE TOPOGRAPHY, EXCEPT AT SPOT LEVELS SHOWN THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. THE SPOT LEVELS ARE TRUE FOR THEIR POSITION, AND ARE INTENDED TO BE USEFUL TO REPRESENT THE GENERAL TERRAIN. CARE SHOULD BE TAKEN IF EXTRAPOLATING.

AJ122941-CAVEAT BY NEW SOUTH WALES TRUSTEE AND GUARDIAN

BOUNDARIES HAVE NOT BEEN LOCATED BY SURVEY. THE BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM THE TITLE DEPOSITED PLAN AND ARE APPROXIMATE RELATIVE TO THE DETAIL SURVEY.



**LEGEND**

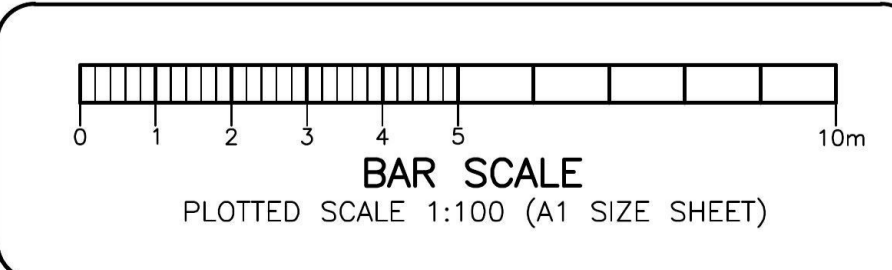
BENCHMARK	▲
TELSTRA PIT	TEL
ELECTRIC LIGHT POLE	LP
POWER POLE	PP
SIGN POST	SP
SEWER INSPECTION PIT	SIP
SEWER VENT	SEWER
MANHOLE	MH
ELECTRICAL PILLAR	Ⓢ
STOP VALVE	SV
WATER HYDRANT	HYD
WATER METER	WM
GAS METER	GM
STATE SURVEY MARK	SSM

**NOTE:**  
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REVISION No.	REVISION DATE:	COMMENT:

**LEGEND:**

EC - EDGE OF CONCRETE	FL - FLOOR LEVEL
TK - TOP OF KERB	PL - POWER LINES
TW - TOP OF WINDOW	BAL - BALCONY
BW - BOTTOM OF WINDOW	AWN - AWNING
TG - TOP OF GUTTER	Ø.4/S10/H16 - DIAMETER/SPREAD/HEIGHT
RR - ROOF RIDGE	



**PLAN SHOWING DETAIL & LEVELS OVER LOT 3 IN DP502054**

CLIENT: LIQUID DESIGN	DATE: 20/09/2017	SCALE: 1:100@A1
PROJECT: KINGSWOOD	DRAWN: RB	CONT. INTERVAL: 0.25m
ADDRESS: 51 JAMISON ROAD, KINGSWOOD	CHK: GS	SHEET 1 OF 1

JOB No.: 171939	LGA: PENRITH
PLAN No.: 171939_A	DATUM: AHD
DATE: 20/09/2017	SCALE: 1:100@A1
DRAWN: RB	CONT. INTERVAL: 0.25m
CHK: GS	SHEET 1 OF 1

# PROPOSED DEVELOPMENT

## 51 JAMISON ROAD, KINGSWOOD

### STORMWATER PLANS

#### GENERAL NOTES

- G1. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS THAT MAY BE ISSUED.
- G2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING FROM THE DRAWINGS. REFER ARCHITECTS DRAWINGS FOR ALL DIMENSIONS.
- G3. REFER ANY DISCREPANCY TO THE ENGINEER/ARCHITECT.
- G4. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE APPROPRIATE SAA SPECIFICATIONS OR CODE AND WITH THE REQUIREMENTS OF THE RELEVANT LOCAL AUTHORITY.
- G5. THE ALIGNMENT AND LEVEL OF ALL SERVICES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
- G6. NO WORKS ARE TO COMMENCE UNTIL THE REQUIRED TREE REMOVAL PERMITS HAVE BEEN GRANTED BY RELEVANT LOCAL AUTHORITY, AND THE APPROPRIATE NOTICE OF INTENTION TO COMMENCE GIVEN.
- G7. ALL SERVICES, OR CONDUITS FOR SERVICING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.
- G8. SUBSOIL DRAINAGE, COMPRISING 100 AGRICULTURE PIPE IN GEO-STOCKING TO BE PLACED AS SHOWN AND AS MAY BE DIRECTED BY THE SUPERINTENDENT. SUBSOIL DRAINAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
- G9. NO WORK IS PERMITTED WITHIN ADJOINING PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE OWNERS OR RESPONSIBLE AUTHORITY.

#### DRAINAGE NOTES

- D1. ALL DRAINAGE OUTLET LEVELS SHALL BE CONFIRMED ON SITE, PRIOR TO CONSTRUCTION COMMENCING.
- D2. ALL PIPES WITHIN THE PROPERTY TO BE MIN. 100 DIA UPVC @ 1% MIN. GRADE. UNO.
- D3. ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOK" OR APPROVED EQUIVALENT GRATES:  
- LIGHT DUTY FOR LANDSCAPED AREAS  
- HEAVY DUTY WHERE SUBJECT TO VEHICULAR TRAFFIC
- D4. PITS WITHIN THE PROPERTY MAY BE CONSTRUCTED AS:  
1) PRECAST STORMWATER PITS  
2) CAST INSITU MASS CONCRETE  
3) CEMENT RENDERED 230mm BRICKWORK  
SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
- D5. ENSURE ALL GRATES TO PITS ARE SET BELOW FINISHED SURFACE LEVEL WITHIN THE PROPERTY. TOP OF PIT RLS ARE APPROXIMATE ONLY AND MAY BE VARIED SUBJECT TO APPROVAL OF THE ENGINEER. ALL INVERT LEVELS ARE TO BE ACHIEVED.
- D6. ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
- D7. ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE.
- D8. PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.
- D9. TRENCH BACK FILL IN ROADWAYS SHALL COMPRISE SHARP, CLEAN GRANULAR BACK FILL IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION TO NON-TRAFFICABLE AREAS TO BE COMPACTED BY RODDING AND TAMPING USING A FLAT PLATE VIBRATOR.
- D10. WHERE A HIGH EARLY DISCHARGE (HED) PIT IS PROVIDED ALL PIPES ARE TO BE CONNECTED TO THE HED PIT, UNO.
- D11. DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.
- D12. COLORBOND OR ZINCALUME STEEL BOX GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.
- D13. EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL, UNO.
- D14. SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.

#### EARTHWORKS NOTES

- E1. THE EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT.
- E2. THE SITE OF THE WORKS SHALL BE PREPARED BY STRIPPING ALL EXISTING TOPSOIL, FILL AND VEGETATION.
- E3. SUBGRADE SHALL BE COMPACTED UNTIL A DRY DENSITY HAS BEEN ACHIEVED OF NOT LESS THAN 100% OF THE STANDARD MAXIMUM DRY DENSITY WHEN TESTED IN ACCORDANCE WITH AS 1289 TESTS E.1.1. OR E.1.2.
- E4. THE EXPOSED SUBGRADE SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR WET AREAS WHICH SHOULD BE LOCALLY EXCAVATED AND BACK FILLED WITH SELECTED MATERIAL.
- E5. THE BACK FILLING MATERIAL SHALL BE IMPORTED GRANULAR FILL OF LOW PLASTICITY, PREFERABLY CRUSHED SANDSTONE, AND TO BE PLACED IN LAYERS NOT EXCEEDING 150 LOOSE THICKNESS AND COMPACTED TO 98% OF STANDARD DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM.
- E6. SITE WORKS ARE TO BE BATTERED TO ADJACENT PROPERTY LEVELS.
- E7. STORMWATER MUST NOT BE CONCENTRATED ON TO AN ADJACENT PROPERTY.
- E8. AT NO TIME DURING OR AFTER CONSTRUCTION IS STORMWATER TO BE PONDED ON ADJOINING PROPERTIES.
- E9. THE SITE SHALL BE GRADED AND DRAINED SO THAT STORMWATER WILL BE DIRECTED AWAY FROM THE BUILDING PLATFORM.
- E10. STORMWATER DRAINAGE SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION. ALL STORMWATER RUNOFF SHALL BE GRADED AWAY FROM THE SITE WORKS AND DISPOSED OF VIA SURFACE CATCHDRAINS AND STORMWATER COLLECTION PITS.
- E11. ALL SURFACE CATCH DRAINS SHALL BE GRADED AT 1% (1 IN 100) MINIMUM. THE GROUND SHALL GRADE AWAY FROM ANY DWELLING AT 5% (1 IN 20) FOR THE FIRST METRE THEN AT 2.5% (1 IN 40).
- E12. WHERE A CUT FILL PLATFORM IS USED THERE SHALL BE A MINIMUM BERM 1000 WIDE TO THE PERIMETER OF THE SITE WORKS WHICH SHALL BE SUPPORTED BY BATTERS OF 3:1 IN FILL.
- E13. ANY VERTICAL OR NEAR VERTICAL PERMANENT EXCAVATION (CUT) DEEPER THAN 600 IN MATERIAL OTHER THAN ROCK SHALL BE ADEQUATELY RETAINED OR BATTERED AT A MINIMUM OF 3:1.
- E14. WHERE BATTERS CANNOT BE PROVIDED TO SUPPORT THE CUT OR FILL, THEY SHALL BE ADEQUATELY RETAINED.
- E15. RETAINING WALLS ARE TO BE CONSTRUCTED WITH ADEQUATE SUBSOIL DRAINAGE.

#### CONCRETE PAVEMENT

- C1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- C2. PROVIDE JOINTING AT MINIMUM 6000 MAX. INTERVALS OR AS OTHERWISE SPECIFIED IN THE DRAWINGS.
- C3. CONCRETE SHALL COMPRISE A MIN. COMPRESSIVE STRENGTH OF 32MPa AT 28 DAYS IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION, UNO.
- C4. ANY SUB-BASE MATERIAL SHALL BE COMPACTED AS OUTLINED IN EARTHWORKS.
- C5. CONCRETE KERB AND GUTTER SHALL COMPRISE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa, UNO.
- C6. CONCRETE WORKS ARE TO BE CURED BY ONE OF THE FOLLOWING MEANS:  
i) WETTING TWICE DAILY FOR THE FIRST THREE DAYS;  
ii) USING AN APPROVED CURING COMPOUNDED FOR A MINIMUM OF 7 DAYS COMMENCING IMMEDIATELY AFTER POURING.

#### FLEXIBLE PAVEMENT NOTES

- F1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- F2. PAVEMENT MATERIAL SHALL CONSIST OF APPROVED OR RIPPED SANDSTONE, NATURAL GRAVEL OR FINE CRUSH ROCK AS PER THE RELEVANT COUNCIL AUTHORITY SPECIFICATION.
- F3. PAVEMENT MATERIALS SHALL BE SPREAD IN LAYERS NOT EXCEEDING 150 AND NOT LESS 75 COMPACTED THICKNESS.
- F4. PAVEMENT MATERIALS SHALL BE SIZED AND OF A STANDARD OUTLINED IN AS1141.
- F5. CRUSHED OR RIPPED SANDSTONE SHALL BE MINUS 75 NOMINAL SIZE DERIVED FROM SOUND, CLEAN SANDSTONE FREE FROM OVERBURDEN, CLAY SEAMS, SHALE AND OTHER DELETERIOUS MATERIAL.
- F6. PAVEMENT MATERIALS SHALL BE COMPACTED BY SUITABLE MEANS TO SATISFY THE FOLLOWING MINIMUM SPECIFICATIONS (AS PER AS1289.2)
- | DESCRIPTION        | MEDIUM DENSITY RATIO |
|--------------------|----------------------|
| SUB-BASE           | 98% MOD              |
| BASE COURSE        | 98% MOD              |
| ASPHALTIC CONCRETE | 97% MOD              |
- AND SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.

- F7. TESTING FOR EACH LAYER SHALL BE UNDERTAKEN BY A N.A.T.A. REGISTERED LABORATORY IN ACCORDANCE WITH AS1289. AT NOT MORE THAN 50m INTERVALS AND A MINIMUM OF TWO PER LAYER. FURTHER FREQUENCY OF TESTING SHALL BE NO LESS THAN THAT REQUIRED BY AS3978.

#### PAVED AREAS NOTES

- A1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- A2. ALL PAVERS ARE TO BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
- A3. TRAFFICABLE AREAS:  
SUB-BASE TO BE 150 COMPACTED THICKNESS DGS75.  
SUB-BASE TO BE SUITABLY COMPACTED TO MEDIUM DENSITY 98% MOD.  
SUB-BASE TO EXTEND AT LEAST 200 BEYOND PAVED SURFACE.  
PAVERS TO BE 80 THICK INTERLOCKING PAVERS ON 50 SAND BEDDING.
- A4. NON TRAFFICABLE AREAS:  
SUB BASE AS PER TRAFFICABLE AREAS  
PAVERS TO BE 80 INTERLOCKING PAVERS ON 50 SAND BEDDING (UNO).

#### EROSION AND SEDIMENT NOTES

- B1. THIS PLAN TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS AS ATTACHED.
- B2. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF THE RELEVANT LOCAL AUTHORITY PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT THE RELEVANT LOCAL AUTHORITY APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTIONS".
- B3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL SHALL BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF.
- B4. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES SUCH THAT MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
- B5. LAY TURF STRIP (MIN 300 WIDE) ON 100 TOPSOIL BEHIND ALL KERB WITH 1000 LONG RETURNS EVERY 6000 AND AROUND STRUCTURES IMMEDIATELY AFTER BACKFILLING AS PER THE RELEVANT LOCAL AUTHORITY SPECIFICATION.
- B6. THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING.
- B7. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO NOMINATED STABILISED ACCESS POINTS.
- B8. WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL THEY SHALL BE IN CLEAN AND STABLE CONDITION.
- B9. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULAR WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
- B10. PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED.
- B11. REVEGETATE ALL TRENCHES IMMEDIATELY UPON COMPLETION OF BACKFILLING.
- B12. ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL:  
- DOWNPIPES CONNECTED  
- PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER

#### SYMBOLS

DESCRIPTION	
	DENOTE ON-SITE DETENTION TANK OR PUMP OUT TANK
	DENOTE ON-SITE DETENTION BASIN
	DENOTE ABSORPTION TRENCH
	DENOTES DOWNPIPE
	DENOTES 100mm DIA STORMWATER SYSTEM PIPE AT 1% MIN. GRADE U.N.O
	DENOTES 150mm DIA STORMWATER SYSTEM PIPE AT 1% MIN. GRADE U.N.O
	DENOTES 225mm DIA STORMWATER SYSTEM PIPE AT 0.5% MIN. GRADE U.N.O
	DENOTES AGG LINE
	DENOTES SEDIMENT FENCE
	DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISH SURFACE LEVEL
	DENOTES CLEANING EYE
	STORMWATER PIT - GRATED INLET
	STORMWATER PIT - SOLID COVER
	MAINTENANCE PIT
	NON RETURN VALVE
	DENOTE ROUND FLOOR DRAINS
	DENOTE SQUARE FLOOR DRAINS
	DENOTE PLANTER BOX DRAINS
	DENOTE GRATED DRAIN
	PROPOSED FINISH FLOOR LEVEL
	DENOTE EXISTING OVERLAND FLOW PATH
	DENOTE RAINWATER TANK
	DENOTE WATER OUTLET
	REDUCED LEVEL/SURFACE LEVELL
	INVERT LEVEL
	TOP OF KERB

#### SCHEDULE OF DRAWINGS

SHEET No	DESCRIPTION
COVER	GENERAL NOTES
SW01	SEDIMENT AND EROSION CONTROL PLAN
SW02	BASEMENT DRAINAGE PLAN
SW03	GROUND FLOOR DRAINAGE PLAN
SW04	STORMWATER SECTIONS AND DETAILS

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ISSUED FOR DA

REVISION	AMENDMENT	ISSUE DATE	ISSUE
H	ISSUED FOR DA	04-04-2019	
G	AMENDED AS PER UPDATED PLANS	28-03-2019	
F	ISSUED FOR COORDINATION	11-03-2019	
E	ISSUED FOR COORDINATION	24-08-2018	
D	ISSUED FOR DA APPROVAL	28-03-2018	
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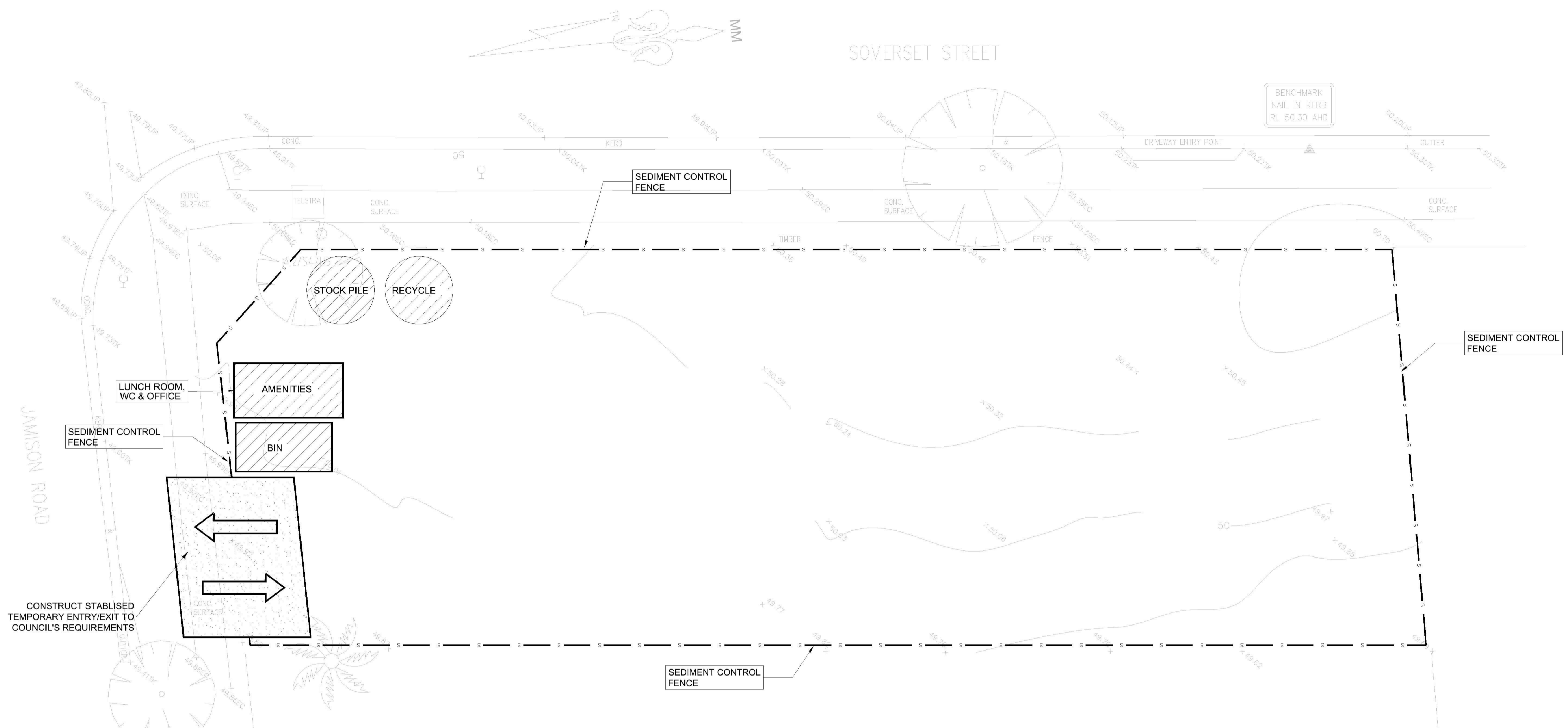
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CLIENT  
 LIQUID  
 DESIGN

PROJECT  
 PROPOSED DEVELOPMENT  
 51 JAMISON ROAD,  
 KINGSWOOD

DRAWING TITLE  
 GENERAL NOTES

SCALES AS SHOWN	DESIGNED SH	DRAFTED EL
DRAWING NO. A9057 - COVER	APPROVED JM	REVISION H



### SEDIMENT AND EROSION CONTROL PLAN

1:100 @ A1

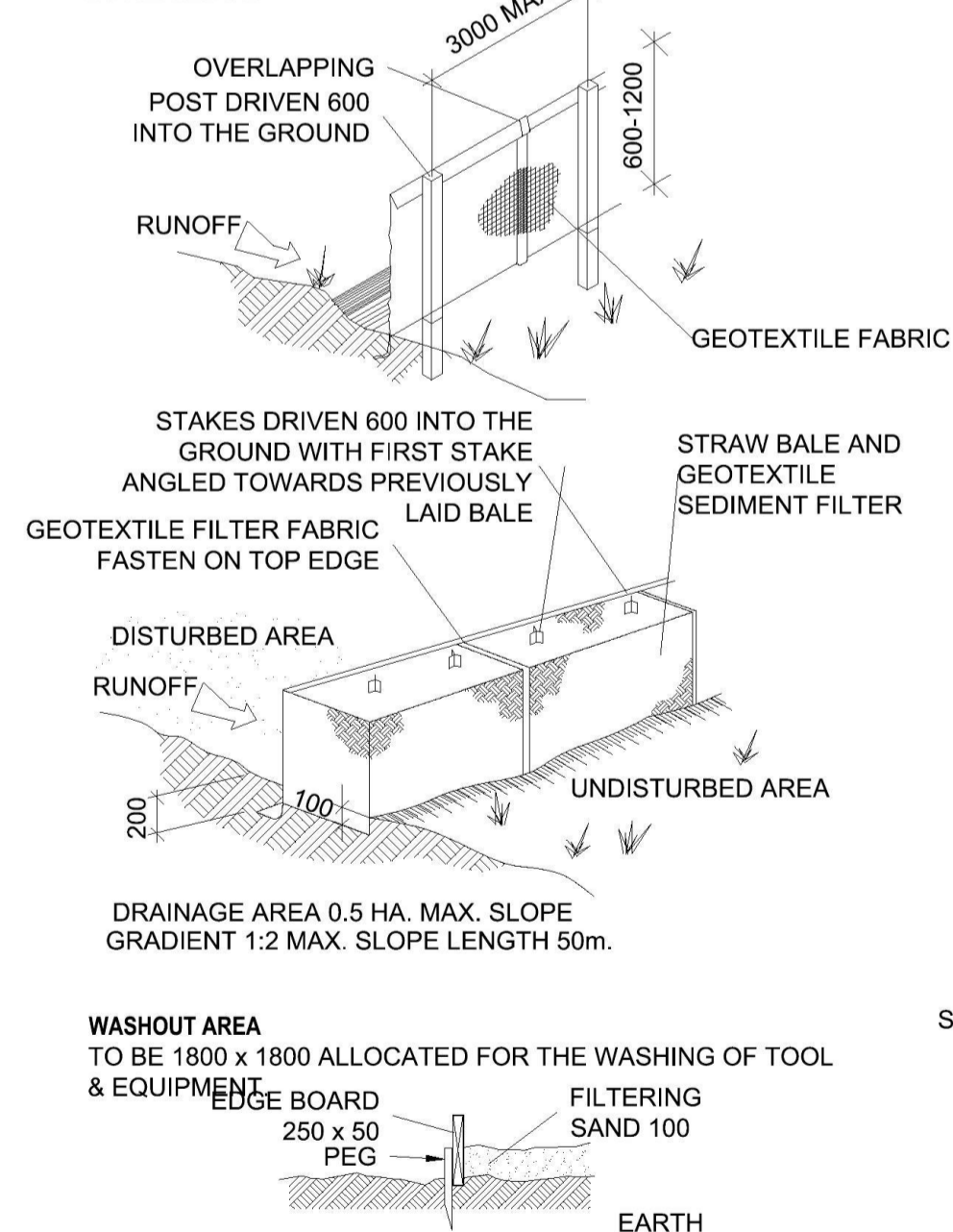
#### SEDIMENT AND EROSION CONTROL NOTES

SEDIMENT AND EROSION CONTROL SHALL BE EFFECTIVELY MAINTAINED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL THE SITE HAS BEEN STABILISED OR LANDSCAPED TO THE SUPERINTENDENT'S SATISFACTION. A SINGLE ALL WEATHER ACCESS WAY WILL BE PROVIDED AT THE FRONT OF THE PROPERTY CONSISTING OF 50-75 AGGREGATE OR SIMILAR MATERIAL AT A MINIMUM THICKNESS OF 150 LAID OVER NEEDLE-PUNCHED GEOTEXTILE FABRIC AND CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL ENSURE THAT NO SPOIL OR FILL ENCLOSES UPON ADJACENT AREAS FOR THE DURATION OF WORKS. THE CONTRACTOR SHALL ENSURE THAT KERB INLETS AND DRAINS RECEIVING STORMWATER SHALL BE PROTECTED AT ALL TIMES DURING DEVELOPMENT. KERB INLET SEDIMENT TRAPS SHALL BE INSTALLED ALONG THE IMMEDIATE VICINITY ALONG THE STREET FRONTAGE. SEDIMENT FENCING SHALL BE SECURED BY POST (WHERE METAL STAR PICKETS ARE USED PLASTIC SAFETY CAPS SHALL BE USED) AT 2000 INTERVALS WITH GEOTEXTILE FABRIC EMBEDDED 200 IN SOIL. ALL TOPSOIL STRIPPED FROM THE SITE AND STOCKPILED DOES NOT INTERFERE WITH DRAINAGE LINES AND STORMWATER INLETS AND WILL BE SUITABLY COVERED WITH AN IMPERVIOUS MEMBRANE MATERIAL AND SCREENED BY SEDIMENT FENCING.

**SOIL CONSERVATION NOTE:**  
PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE 'SEDIMENT FENCE', 'SEDIMENT TRAP' AND WASHOUT AREA TO ENSURE THE CAPTURE OF WATER BORNE MATERIAL GENERATED FROM THE SITE. MAINTAIN THE ABOVE DURING THE COURSE OF CONSTRUCTION, AND CLEAR THE 'SEDIMENT TRAP' AFTER EACH STORM.  
**SEDIMENT TRAP**  
TO BE 1800 x 1000 WIDE 500 DEEP PIT, LOCATED AT THE LOWEST POINT TO THE TRAP SEDIMENT.

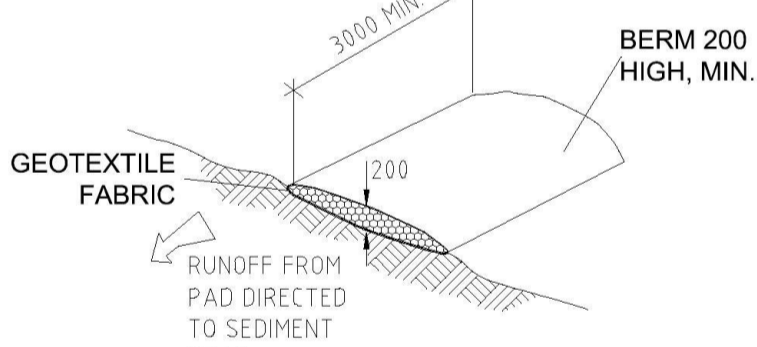
#### SEDIMENT FENCE

PROVIDE 'SEDIMENT FENCE' ON DOWN SLOPE BOUNDARY AS SHOWN ON PLAN. FABRIC TO BE BURIED BELOW GROUND AT LOWER EDGE.



#### VEHICLE ACCESS TO SITE

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.



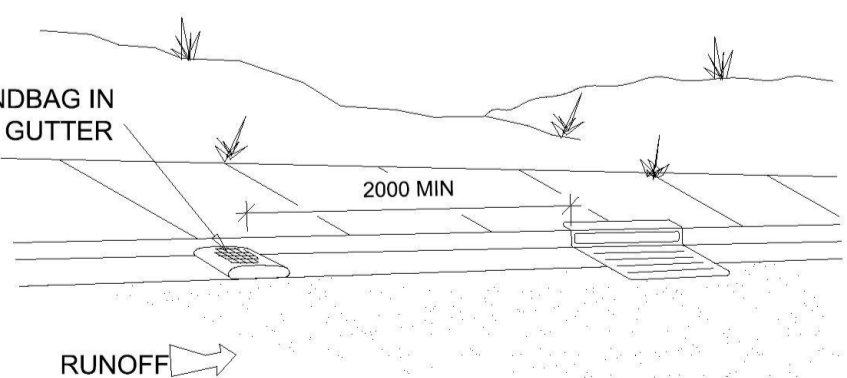
#### BUILDING MATERIAL STOCKPILES

ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND EROSION. MATERIAL SHOULD NEVER BE PLACED IN THE STREET GUTTER WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM.



#### SANDBAG KERB SEDIMENT TRAP

IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY BE NEEDED IN THE STREET GUTTER.



#### GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE).

NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS DIRECTED OTHERWISE.

#### STORMWATER DRAINAGE

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 'STORMWATER DRAINAGE' & AS/NZS 3500.3.2-1998 'STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS'.

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

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REVISION	AMENDMENT	ISSUE DATE	ISSUE
H	ISSUED FOR DA	04-04-2019	
G	AMENDED AS PER UPDATED PLANS	28-03-2019	
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CLIENT  
 PROJECT  
**PROPOSED DEVELOPMENT**  
**51 JAMISON ROAD,**  
**KINGSWOOD**

DRAWING TITLE		
SEDIMENT AND EROSION CONTROL PLAN		
SCALES AS SHOWN	DESIGNED SH	DRAFTED EL
DRAWING NO. A9057 - SW01	APPROVED JM	REVISION H

# BASEMENT FLOOR DRAINAGE PLAN

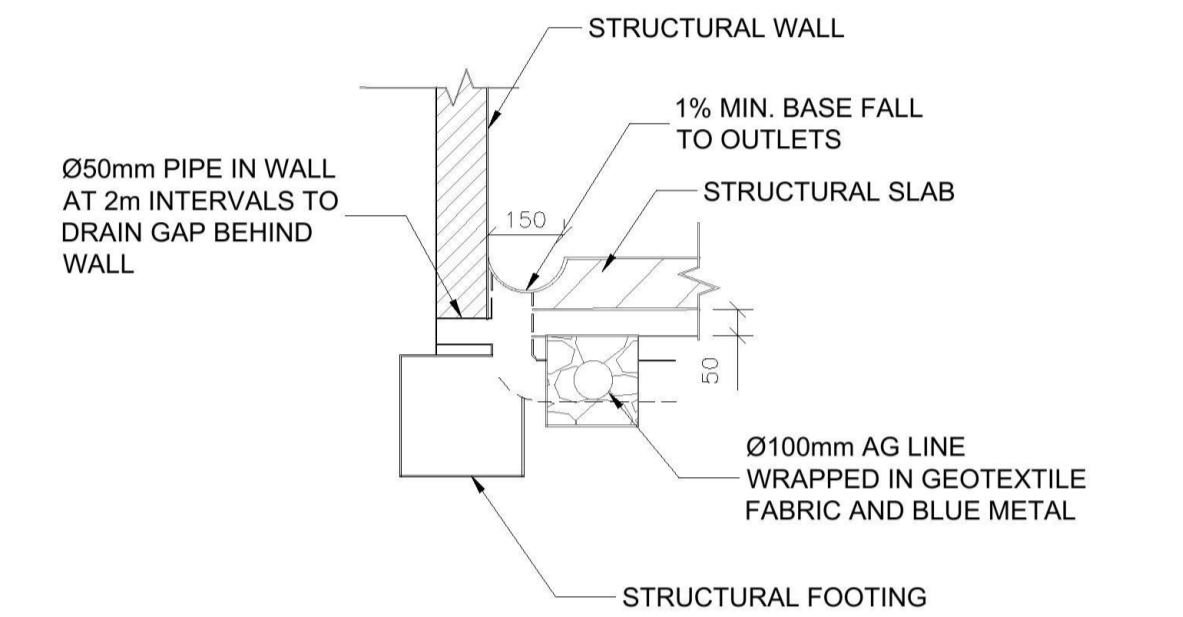
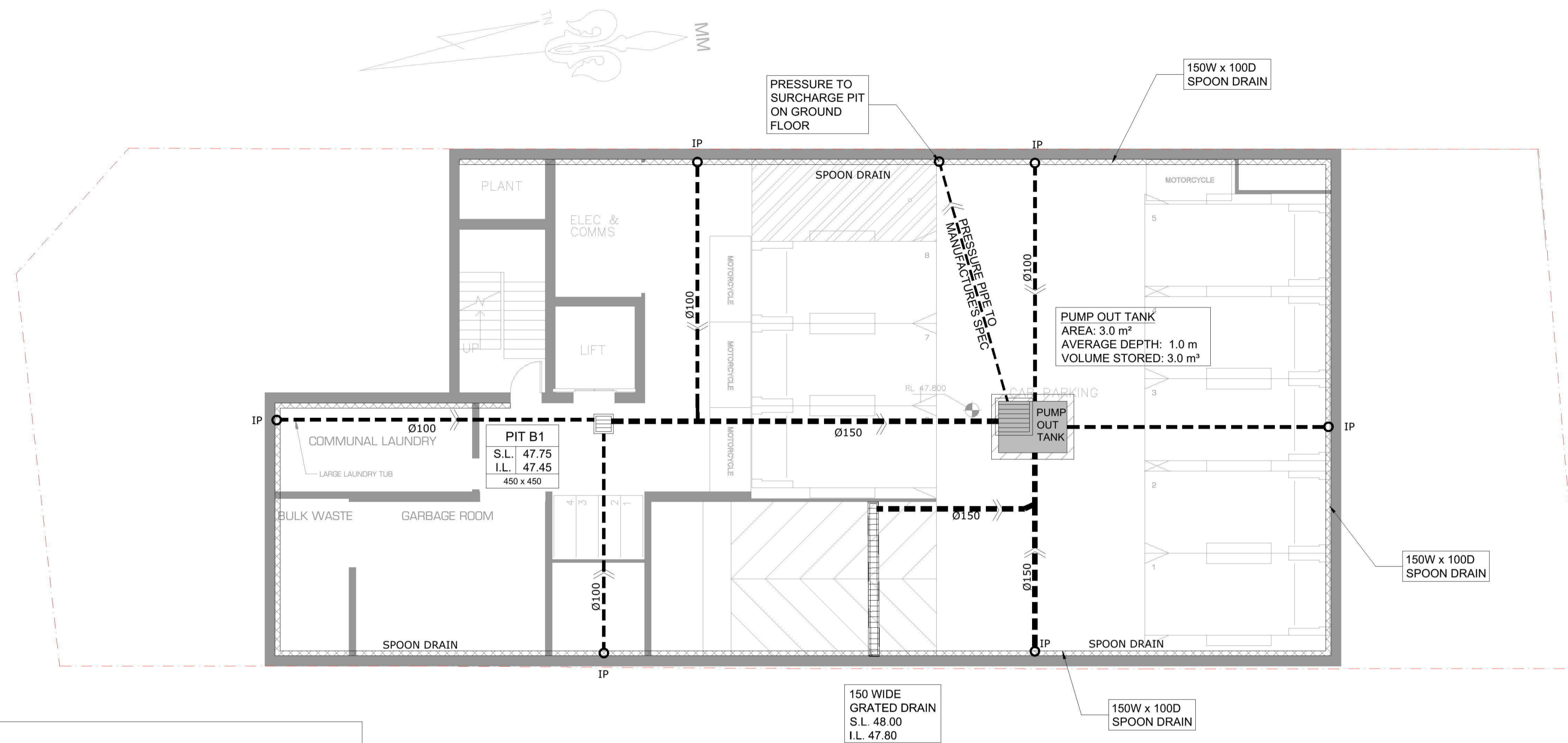
1:100 @ A1

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH)  
STORMWATER DRAINAGE PIPE, UNO.

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.  
FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES  
TO BUILDER'S DETAIL, TYPICAL MINIMUM EFFECTIVE EAVES GUTTER  
SIZE = 6700 mm<sup>2</sup>  
MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

- DP = Ø100, UNO.
- FD = FLOOR OUTLET, REFER TO DETAIL
- SIP = SURFACE INLET PIT (NO LINTEL)
- 100Ø = Ø100 CHARGED LINE
- IP = Ø150 INSPECTION POINT
- RWH = RAIN WATER HEAD
- RWO = RAIN WATER OUTLET (300 x 300)
- FG = FLOOR GULLY Ø150
- S<sub>PP</sub> = RAINWATER SPREADER
- RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

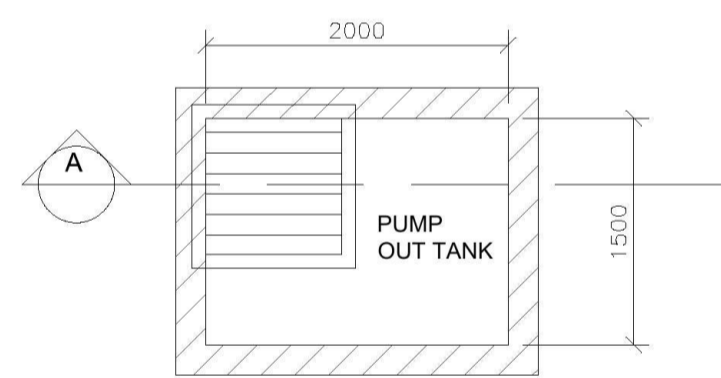


SECTION - SUBSOIL DRAINAGE DETAILS  
1:10

## STANDARD PUMP OUT DESIGN NOTES

THE PUMP OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED IN THE FOLLOWING MANNER:-

- > THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATIVELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.
- > A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
- > A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.
- > A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.
- > AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.



BASEMENT PUMP OUT TANK PLAN  
1:50 @ A1

## PUMP DESIGN SUMMARY

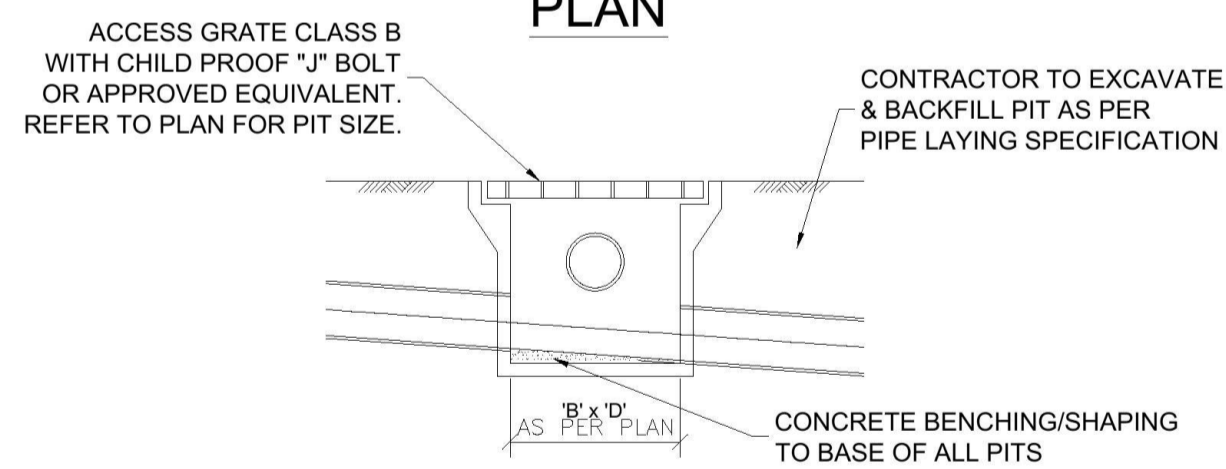
CATCHMENT AREA = 9.9 m<sup>2</sup> (DRIVEWAY RAMP)  
1:100 ARI 2 HOURS STORM = 41.8mm/hr  
TOTAL WATER = 2 x 0.0418 x 9.9 = 0.83m<sup>3</sup>

SEEPAGE = 2.5 ML/YEAR/Ha = 6.85 m<sup>3</sup>/Ha  
SEEPAGE = AREA X 6.85 = 0.06703 X 6.85 = 0.50m<sup>3</sup>

TOTAL STORAGE VOLUME REQUIRED = 0.50+0.83=1.33 m<sup>3</sup>  
PUMP-OUT TANK STORAGE PROVIDED = 3.00 m<sup>3</sup> (MIN. VOLUME AS PER AUSTRALIAN STANDARDS)

PUMP HEAD = 4 m  
RAINFALL INTENSITY FOR CALCULATIONS = 100 YEAR ARI  
STORM DURATION 5 MINUTE = 243 mm/h  
PUMP RATE REQUIRED = 243 x 50 / 3600 = 3.375 l/s  
EACH PUMP SHALL HAVE A MIN. REQUIRED CAPACITY OF 5 L/S AS PER STORMWATER DRAINAGE POLICY 2016 - CLAUSE 3.4 - BASEMENT DRAINAGE

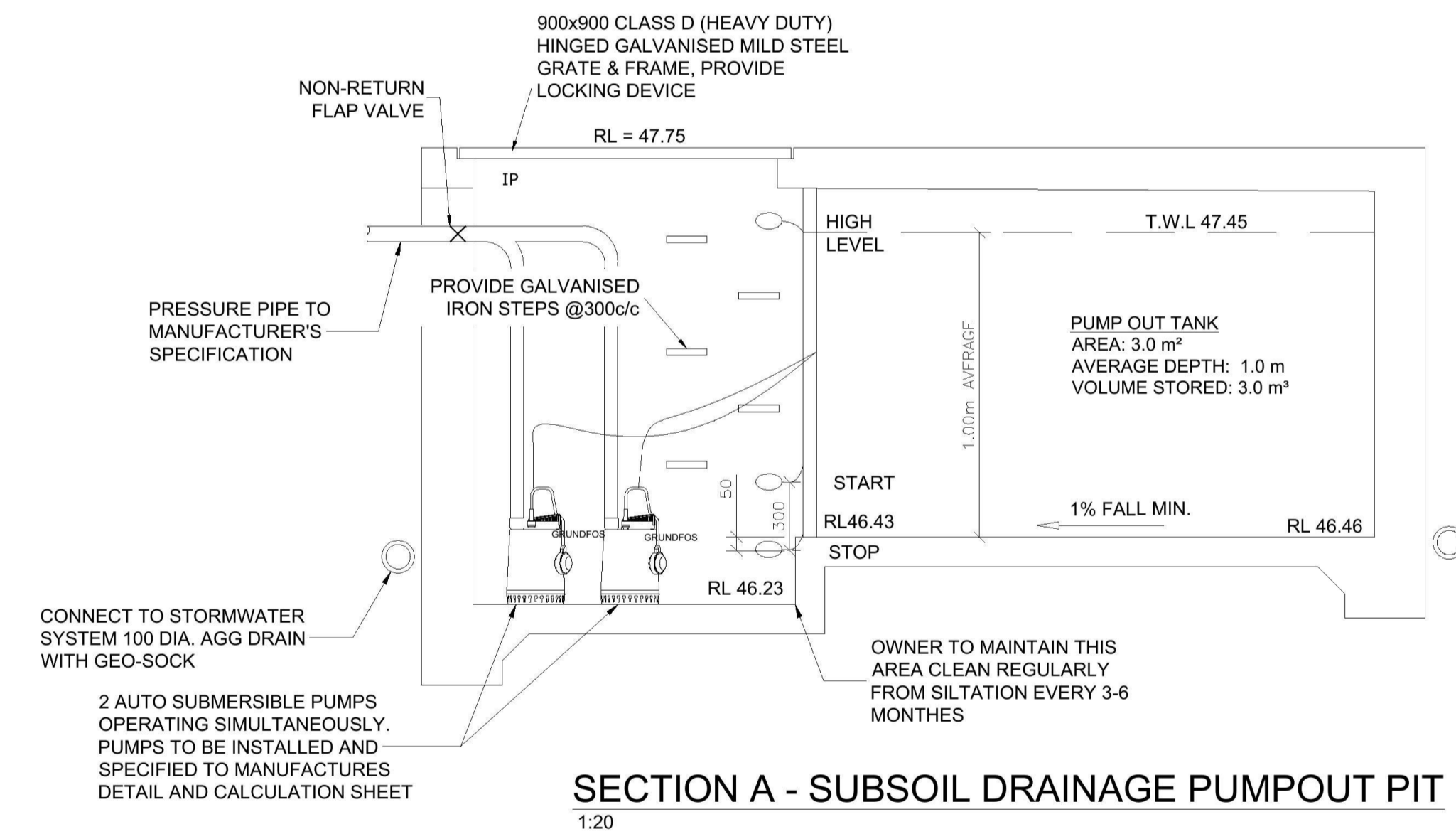
THEREFORE PUMP OUT RATE = 5 L/S



SECTION - TYPICAL SURFACE INLET PIT  
1:5 @ A1  
TYPICAL FOR ALL PITS IN NON-TRAFFIC AREAS



DETAIL - CONFINED SPACE SIGN  
NTS



SECTION A - SUBSOIL DRAINAGE PUMPOUT PIT  
1:20



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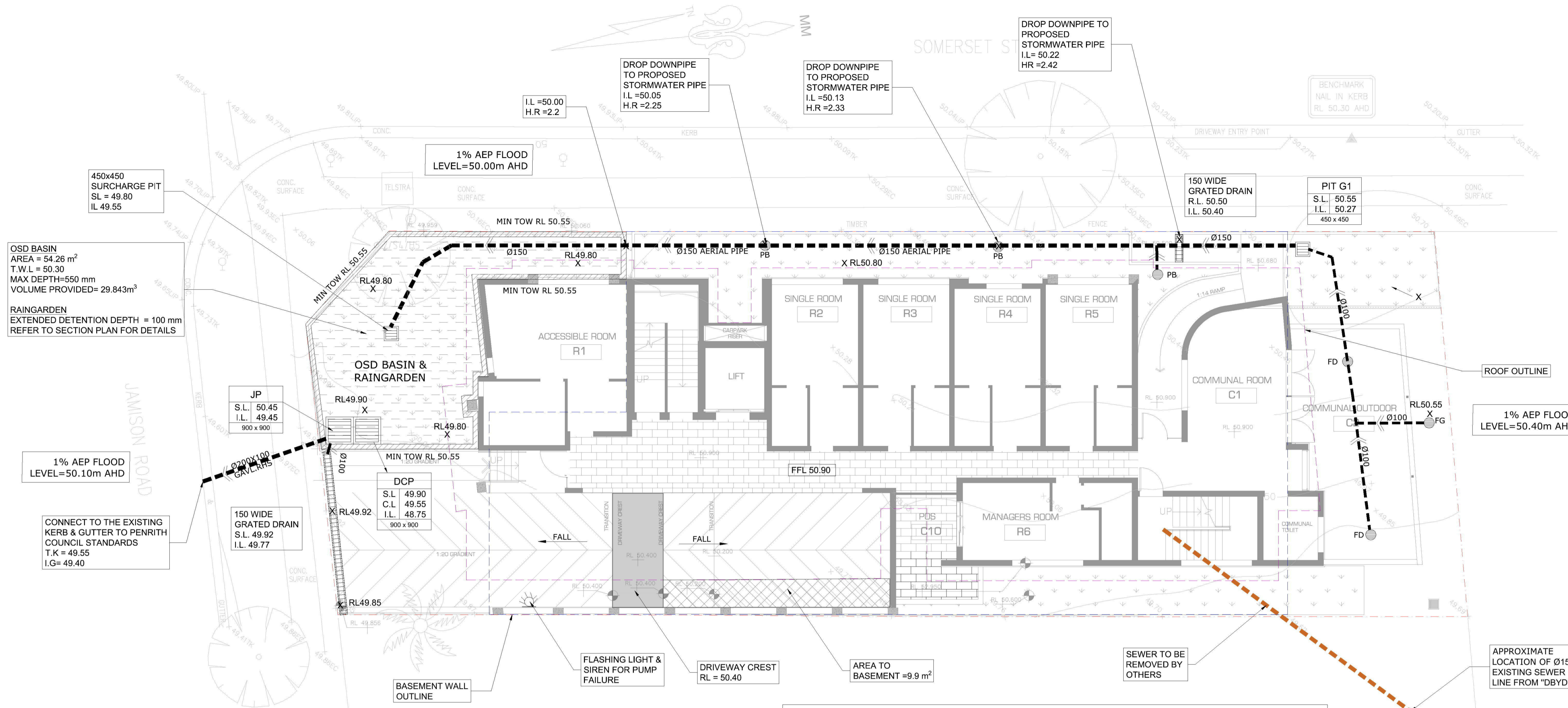
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CLIENT  
**LIQUID**  
DESIGN

PROJECT  
**PROPOSED DEVELOPMENT**  
51 JAMISON ROAD,  
KINGSWOOD

DRAWING TITLE  
**BASEMENT FLOOR DRAINAGE PLAN**

SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	EL
DRAWING NO.	APPROVED	REVISION
A9057 - SW02	JM	H



**GROUND FLOOR DRAINAGE PLAN**

1:100 @ A1

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH)  
STORMWATER DRAINAGE PIPE, UNO.

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.  
FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL, TYPICAL MINIMUM EFFECTIVE EAVES GUTTER SIZE = 6700 mm<sup>2</sup>  
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  - FG = FLOOR GULLY Ø150
  - S<sub>150</sub> = RAINWATER SPREADER
  - RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

**BIORETENTION SYSTEM - VEGETATION**

VEGETATION MINIMISES SURFACE CLOGGING AND ASSISTS IN POLLUTANT REMOVAL VIA BIOLOGICAL PROCESSES. SOME PLANT SPECIES THAT CAN BE USED INCLUDE:

- IMPERATA CYLINDRICA (BLADY GRASS),
- FICINIA NODOSA (SYN. ISOLEPIS NODOSA) (KNOBBY CLUB RUSH),
- JUNCUS USITATUS (COMMON RUSH),
- LOMANDRA LONGIFOLIA (MATRUSH),
- POA SIEBREIANA (GREY TUSsock GRASS),
- THEMEDA AUSTRALIS (KANGAROO GRASS),
- DIANELLA CAERULEA (BLUE FLAX-LILY),
- CAREX APPRESSA (TUSsock SEDGE)

A MINIMUM OF 8 PLANTS PER SQUARE METRE IS RECOMMENDED. SHRUBS OR TREES ALSO BE INCLUDED

**OSD DESIGN SUMMARY**

SIMPLIFIED METHOD  
TOTAL SITE AREA = 670.3 m<sup>2</sup>  
SSR = 280 m<sup>3</sup>/Ha  
PSD = 120 L/s/Ha

BYPASS AREA = 54.5m<sup>2</sup> (8.1% OF THE SITE AREA)  
ADJUST PSD & SSR AS PER STORMWATER DRAINAGE POLICY - TABLE 8  
FINAL SSR = 375m<sup>3</sup>/Ha  
FINAL PSD = 65.1 L/s/Ha

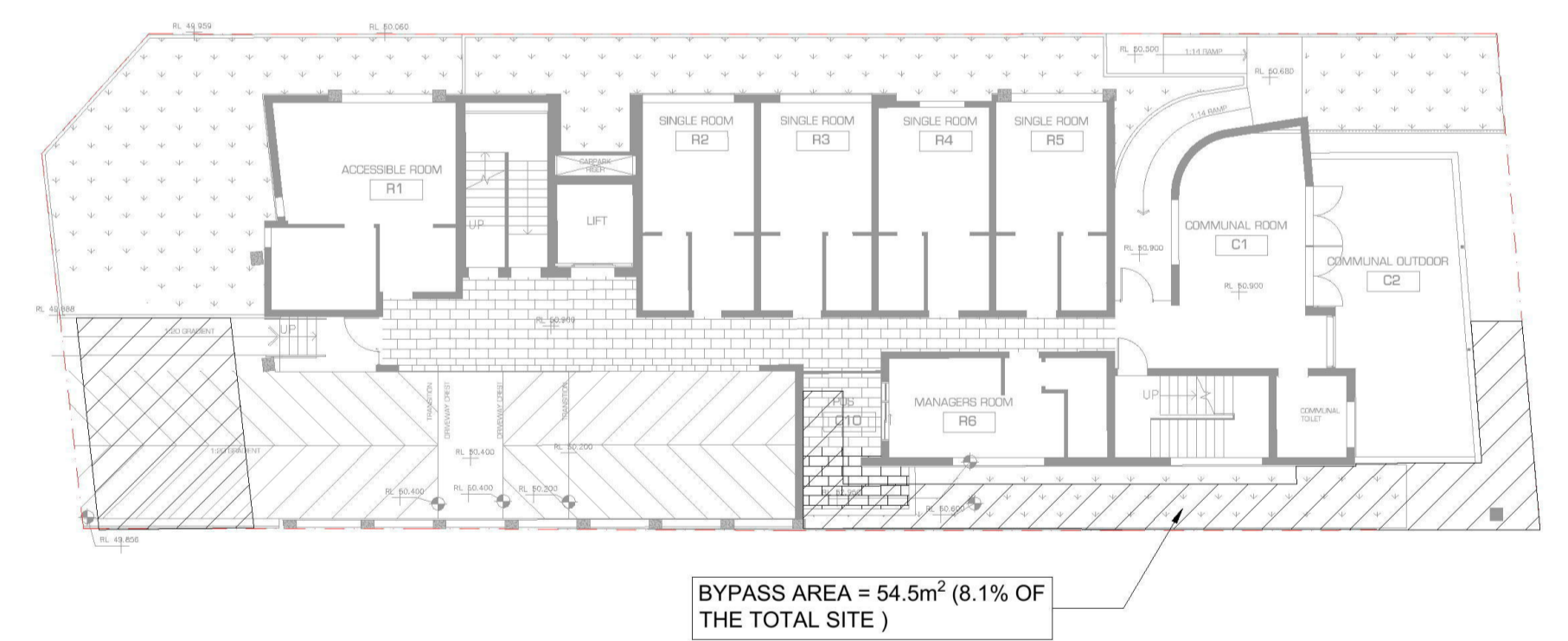
OSD VOLUME REQUIRED = 0.067 x 375 = 25.125m<sup>3</sup>  
PSD REQUIRED = 0.067 x 65.1 = 4.36 L/s  
OSD VOLUME FOR LANDSCAPE = 25.125x 1.15 = 28.90m<sup>3</sup>

OSD PROVIDED:  
OSD BASIN VOLUME = 29.843m<sup>3</sup>  
ORIFICE DIAMETER = 38 mm

NOTE: ALL ROOF STORMWATER RUNOFF TO BE CONNECTED TO SURCHARGE PIT WITHIN RAINGARDEN

**DESIGN SUMMARY**

- STORMWATER DRAINAGE POLICY - CLAUSE 4.3.2 - HYDRAULIC CONTROLS  
ALL PITS CONNECTED TO AN OSD SYSTEM SHALL BE MINIMUM 100mm ABOVE THE TOP OF WATER LEVEL TO ENSURE THERE IS NOT SURCHARGE DUE TO TAIL WATER LEVELS IN THE STORAGE AREA
- STORMWATER DRAINAGE POLICY - CLAUSE 4.3.6 - OSD ABOVE GROUND STORAGE  
MAXIMUM DEPTH FOR ABOVE GROUND OSD STORAGE IS 600mm ON LANDSCAPE AREA
- STORMWATER DRAINAGE POLICY - CLAUSE 4.3.5 SIZING OF OSD SYSTEM  
NOT MORE THAN 15% OF THE TOTAL SITE AREA WILL BE PERMITTED TO BYPASS THE OSD SYSTEM. FOR EACH SQUARE METRE OF AREA BYPASSING THE OSD SYSTEMS, THE PSD AND SSR OF THE OSD SYSTEM SHALL BE ADJUSTED ACCORDINGLY.



**BYPASS AREA PLAN**

1:200

**WATER SENSITIVE URBAN DESIGN SUMMARY**

DEEM TO COMPLY TOOLKIT FOR RESIDENTIAL DEVELOPMENT WITH BASEMENT PROPOSED

TOTAL SITE AREA = 670.3 m<sup>2</sup> < 5000m<sup>2</sup>  
TOTAL IMPERVIOUS AREA = 502.5 m<sup>2</sup>  
TOTAL IMPERVIOUS BYPASS AREA = 54.5 m<sup>2</sup> (10.9% OF TOTAL IMPERVIOUS AREA)

FROM FIGURE 3.1 - RAINGARDEN FILTER AREA SIZING FOR RESIDENTIAL DEVELOPMENTS  
RAINGARDEN AREA = 2.45% OF TOTAL IMPERVIOUS AREA  
= 2.45% x 502.05 = 12.30 m<sup>2</sup> WITH 100mm EXTENDED DETENTION DEPTH

RAINGARDEN FILTER AREA PROVIDED = 54.44m<sup>2</sup> (REFER TO PLAN VIEW & SECTIONSDetails ON DRAWING No. SW04)

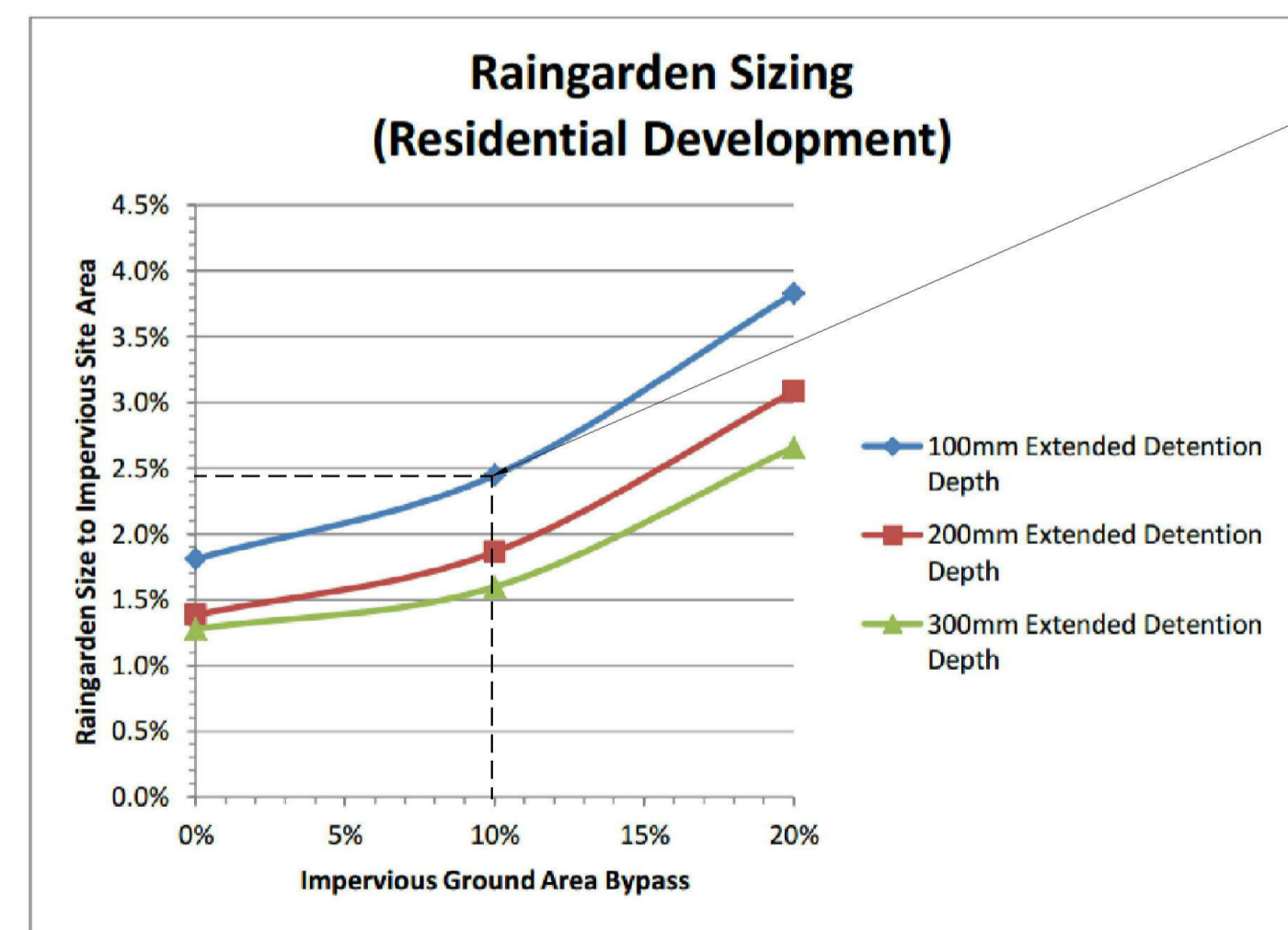


Figure 3.1 -Raingarden Filter Area Sizing for Residential Developments

**ISSUED FOR DA**



REVISION	AMENDMENT	ISSUE DATE	ISSUE
H	ISSUED FOR DA	04-04-2019	
G	AMENDED AS PER UPDATED PLANS	28-03-2019	
F	ISSUED FOR COORDINATION	11-03-2019	
E	ISSUED FOR COORDINATION	24-08-2018	
D	ISSUED FOR DA APPROVAL	28-03-2018	
C	AMENDED AS PER ARCHITECT'S REQUEST	23-02-2018	
B	AMENDED AS PER ARCHITECTURAL UPDATES	05-02-2018	
A	ISSUED FOR COORDINATION	16-01-2018	



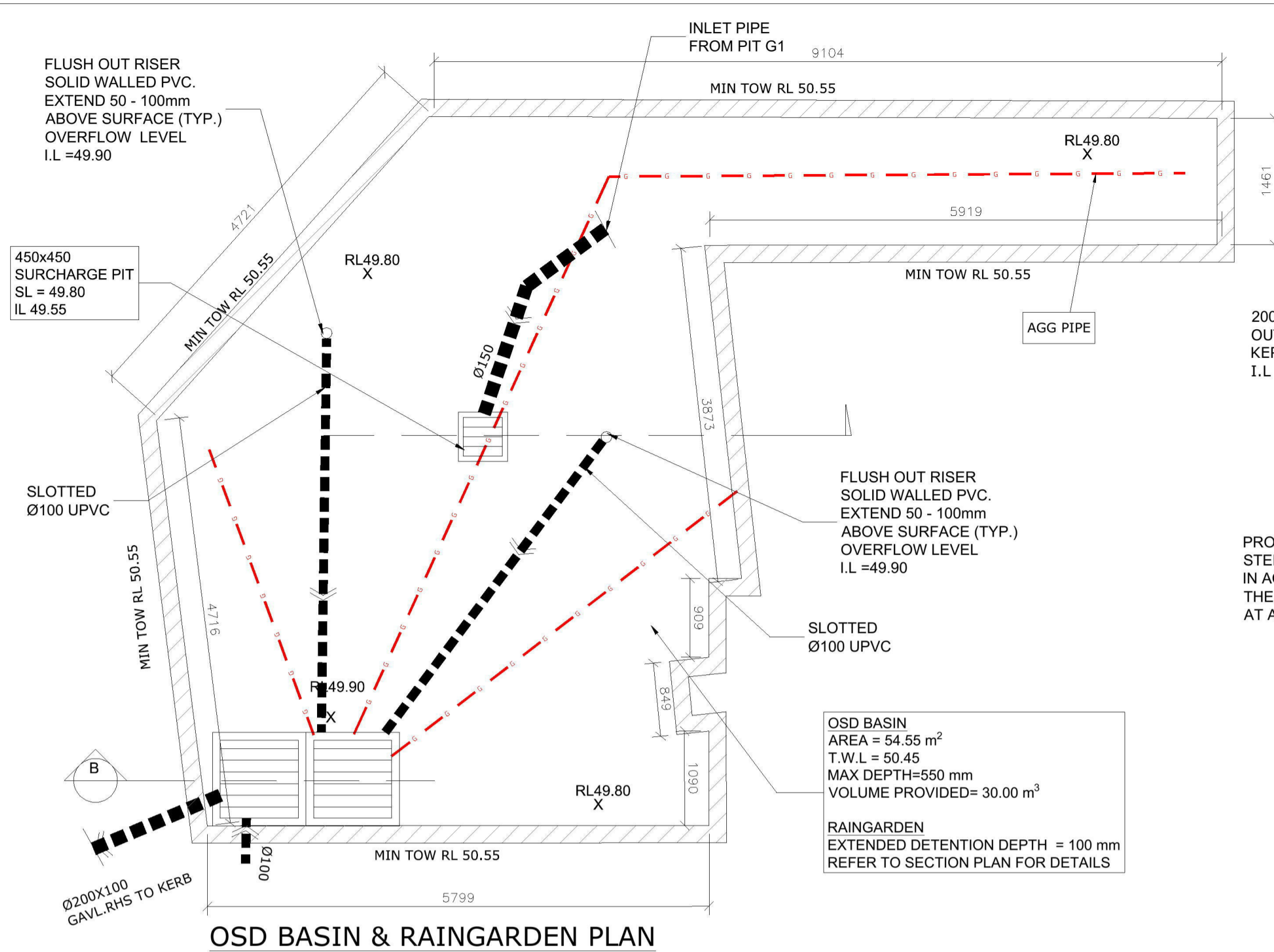
Phone: (02) 9745 5202  
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Email: info@alphaengineering.com.au  
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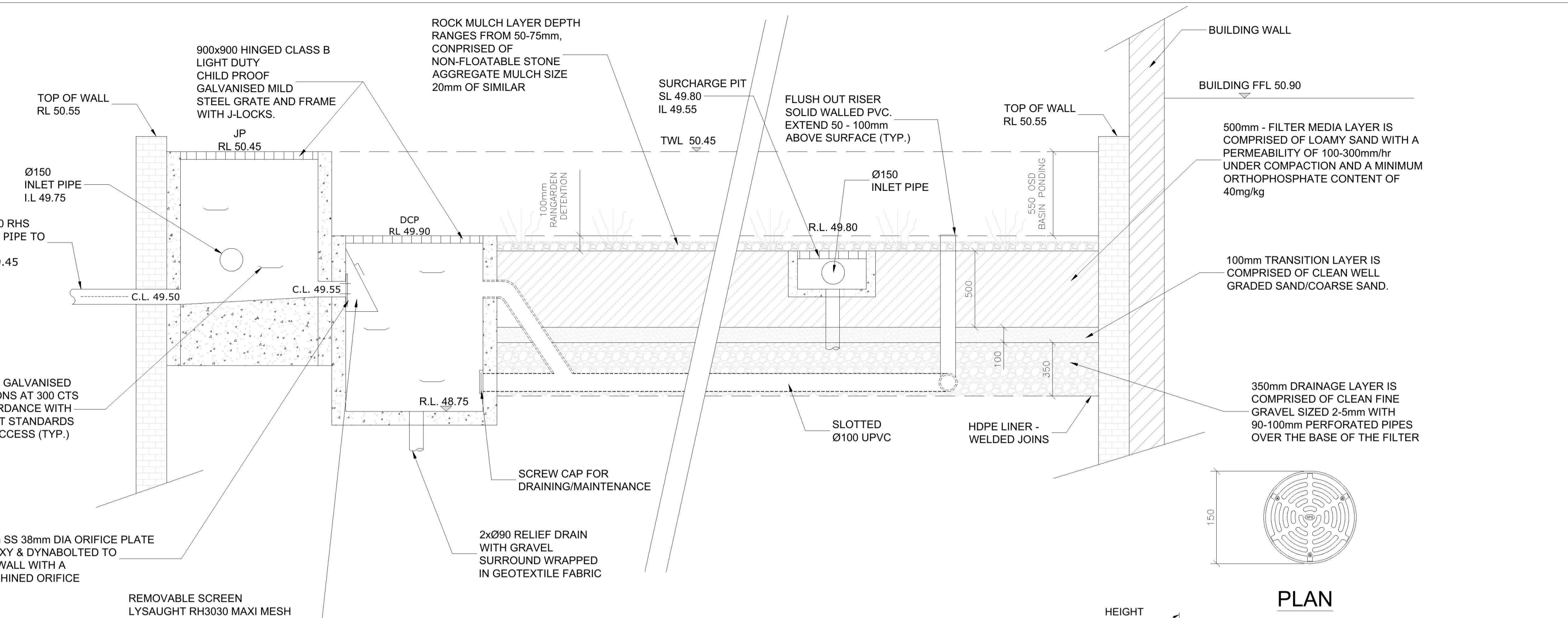
PROJECT  
**PROPOSED DEVELOPMENT**  
51 JAMISON ROAD,  
KINGSWOOD

DRAWING TITLE		
GROUND FLOOR DRAINAGE PLAN		
SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	EL
DRAWING NO.	APPROVED	REVISION
A9057 - SW03	JM	H

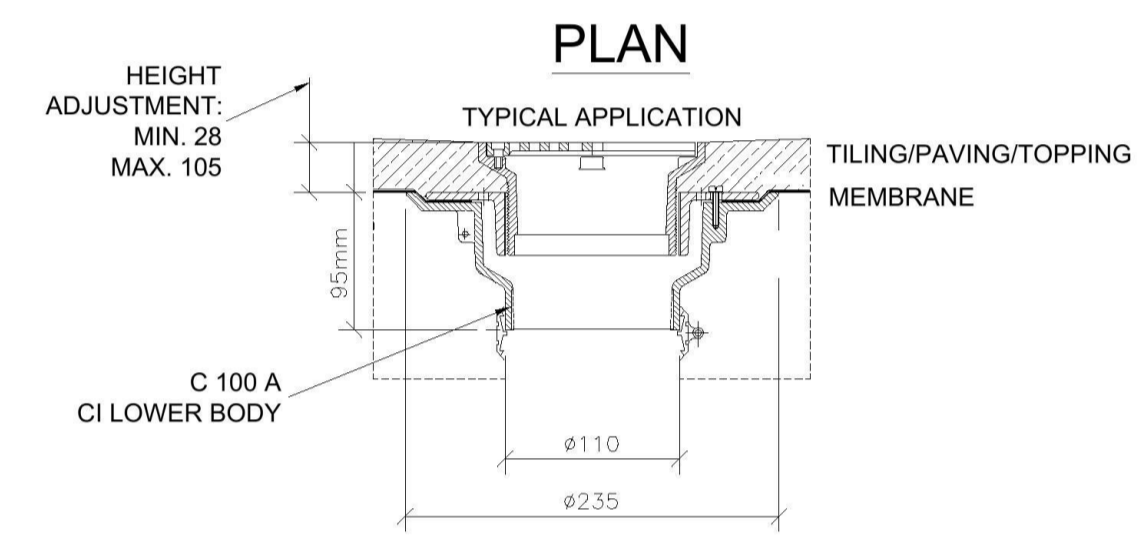


**OSD BASIN & RAINGARDEN PLAN**  
1:50

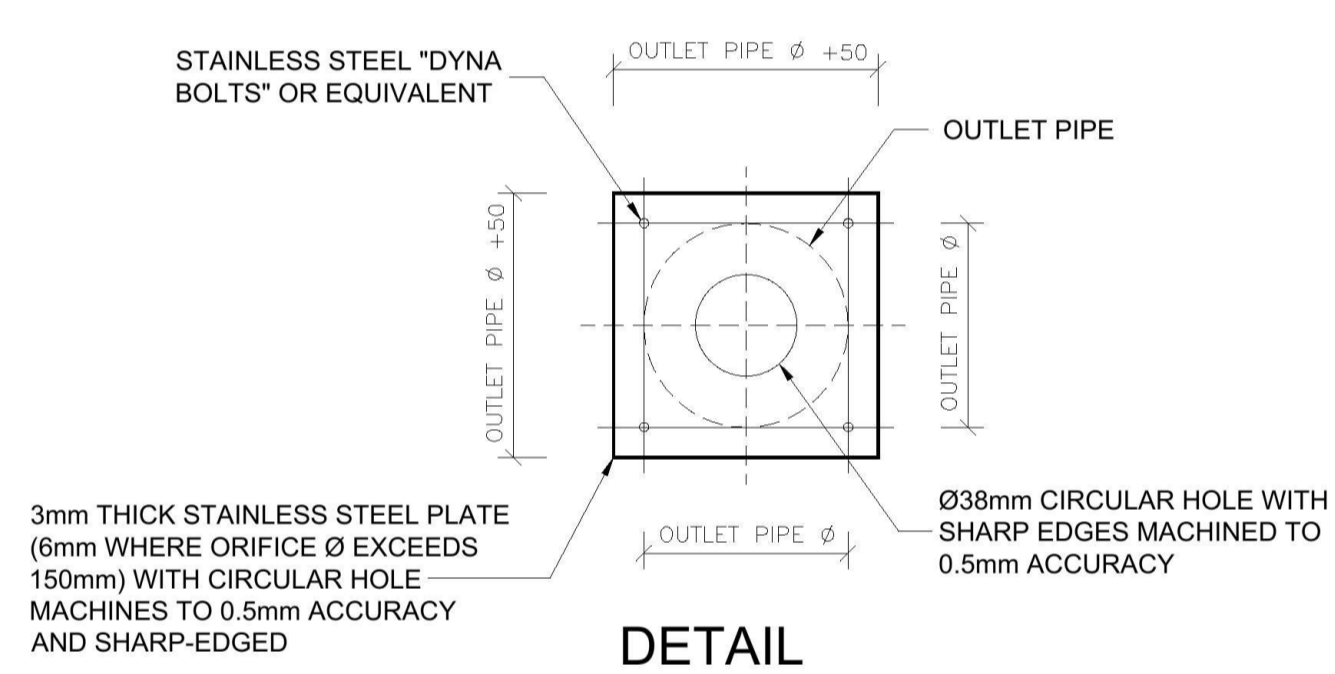
OSD BASIN  
AREA = 54.55 m<sup>2</sup>  
T.W.L = 50.45  
MAX DEPTH=550 mm  
VOLUME PROVIDED= 30.00 m<sup>3</sup>  
RAINGARDEN  
EXTENDED DETENTION DEPTH = 100 mm  
REFER TO SECTION PLAN FOR DETAILS



**STANDARD RAINGARDEN & OSD COMBINE SECTION B AS PER PERTH COUNCIL WSUD STANDARDS**  
SCALE 1:20 @ A1

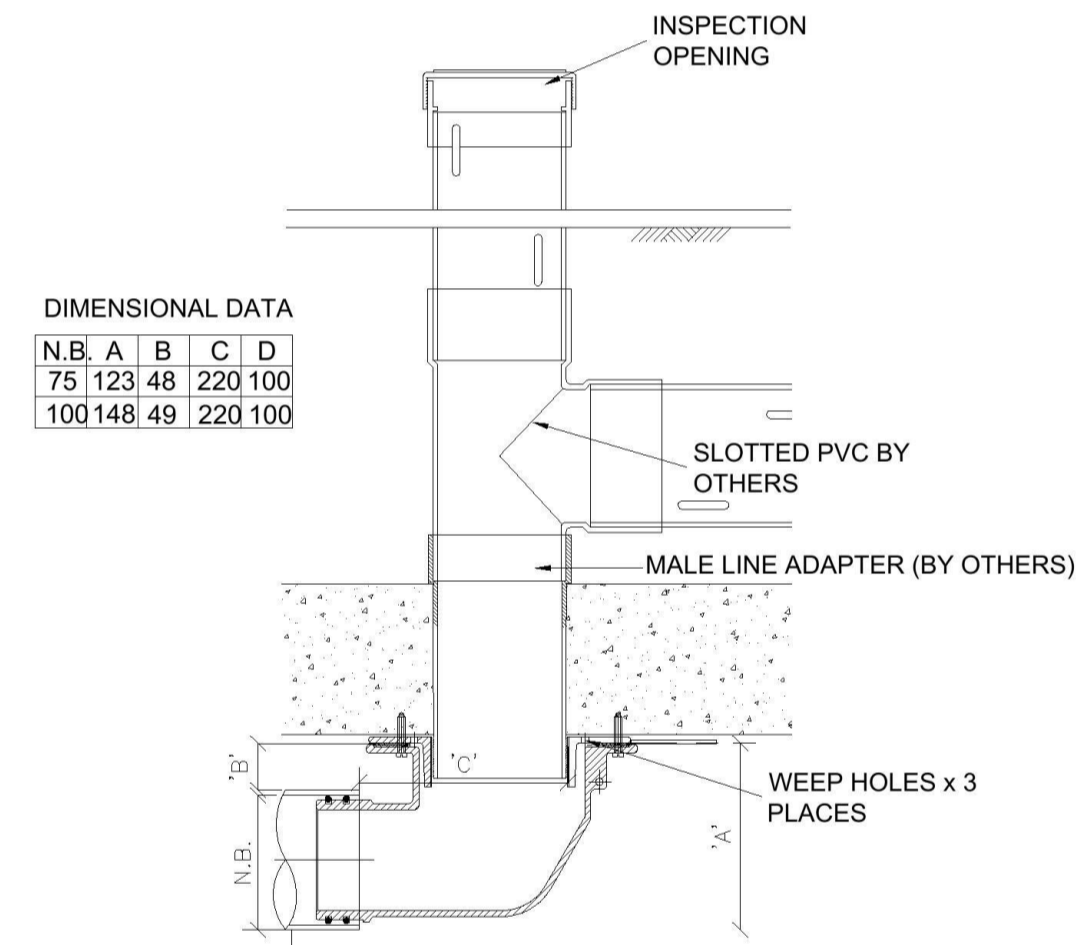


**SECTION - SPS TRUFLO Ø150 OR EQUIVALENT FLOOR DRAIN (FD) INLET IN SUSPENDED SLAB**  
1:5 @ A1  
SPECIFICATION CODE:  
R150 G/C (BRONZE GRATE, CI LOWER BODY)  
R150N/C (NICKEL - BRONZE GRATE, CI LOWER BODY)  
R150 S/C (316 STAINLESS STEEL GRATE, CI LOWER BODY)



**DETAIL ORIFICE PLATE**  
1:10

Orifice Plate Discharge Calculation :	
<b>5 Year</b>	
Q <sub>max</sub> =	0.0020 m <sup>3</sup> /s
h =	0.41 m
Cd =	0.61
<b>Orifice Diameter</b>	$D = \sqrt{\frac{0.471 \times Q}{h^{0.5}}} = 0.038 \text{ (m)}$



**SECTION - SPS TRUFLO 100SQ OR EQUIVALENT PLANTER BOX DRAIN**  
1:5  
SPECIFICATION CODE:  
C100/90 A 100mm SIDE OUTLET



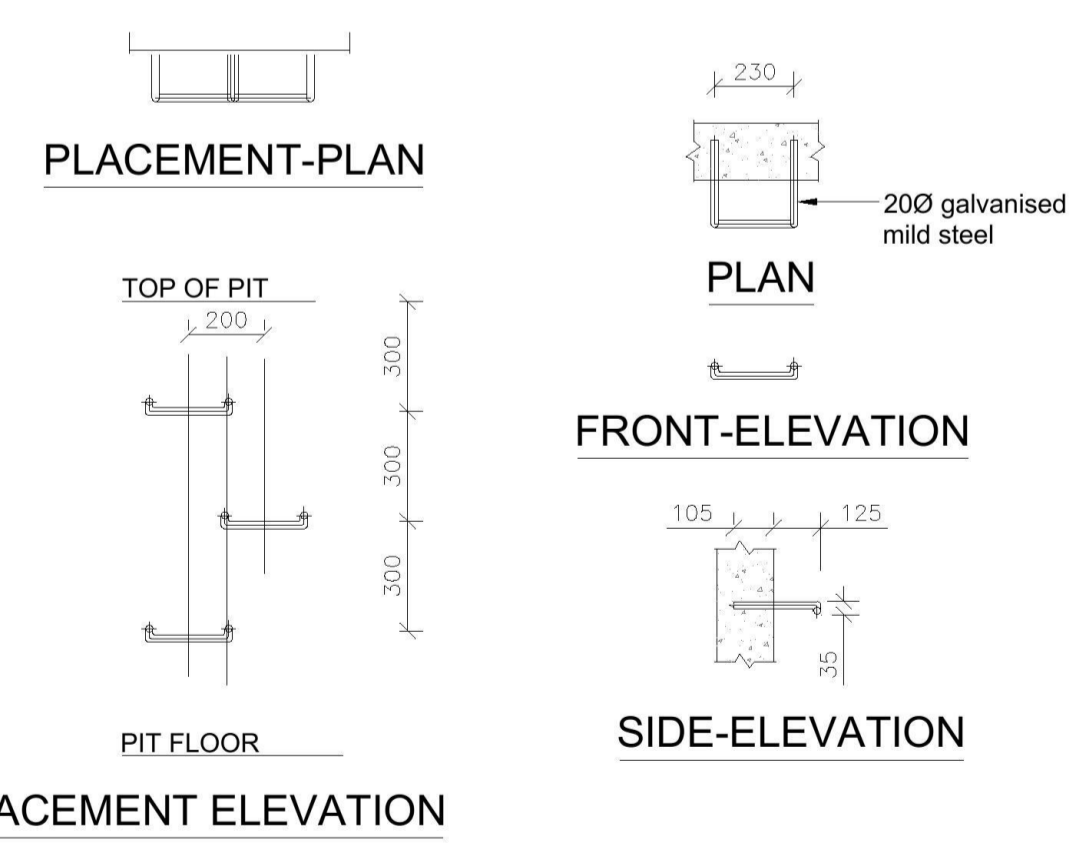
**OSD WARNING SIGN**  
NTS

**OPERATION & MAINTENANCE PLAN FOR RAINGARDEN**  
NTS

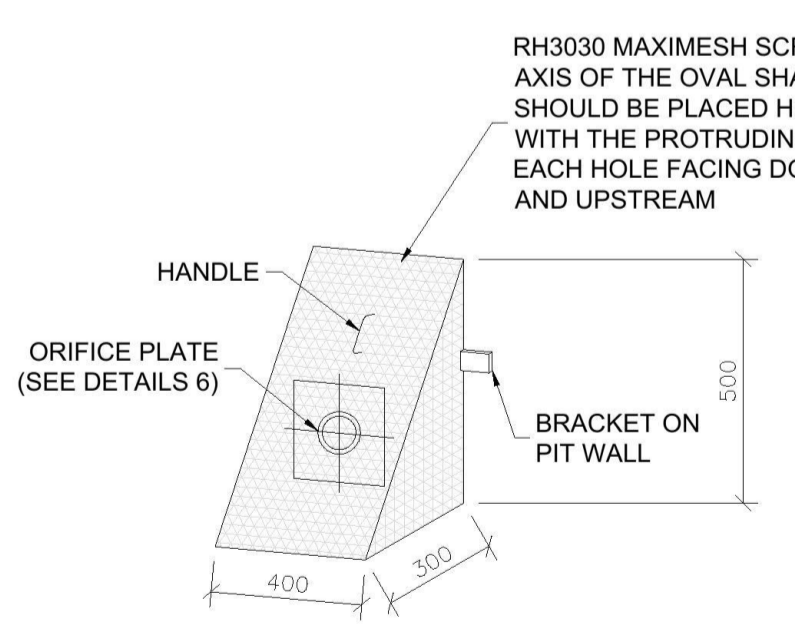
SAMPLE RAINGARDEN MAINTENANCE PLAN		
Location:	51 JAMISON ROAD, KINGSWOOD	DA No:
INSPECTION ITEMS	FREQUENCY	ACTION REQUIRED
Mulch	3 months	Replace mulch as needed with a material that will not float away
Surface vegetation	6 months	<ul style="list-style-type: none"> <li>Inspect health of plants and trim where necessary</li> <li>Remove and replace diseased/dead plants with same species</li> <li>Remove weeds</li> </ul>
Debris/sediment	6 months	Inspect and clean debris/sediment build-up from surface, inlet area and overflow.
Ponding	6 months	If ponding occurs for more than 3 days after storms, check whether underdrain or filter media is blocked
Outlet/overflow pit	Yearly	Repair where cracking or spalling of concrete surfaces is identified
Underdrainage	5 years	Flush underdrainage
Filter media	~30 years	Replace filter media



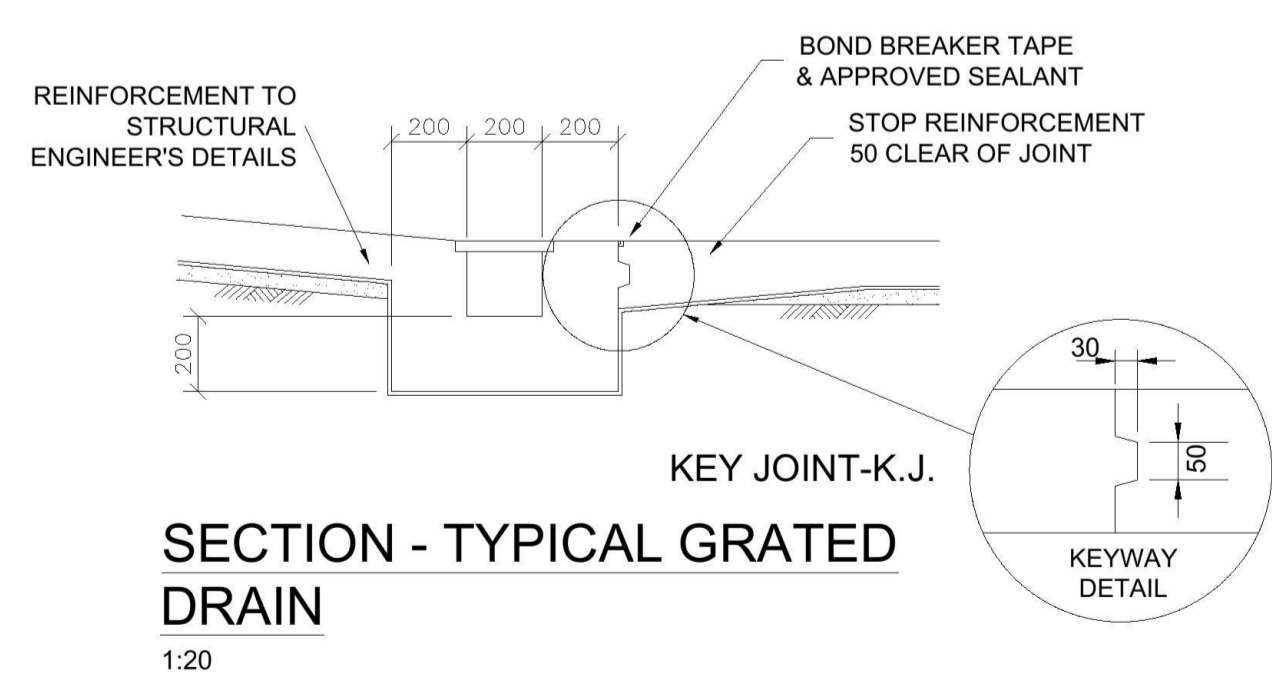
**ISSUED FOR DA**



**TYPICAL STEP IRONS**  
1:20



**DETAIL - STANDARD TRASH SCREEN**  
1:20

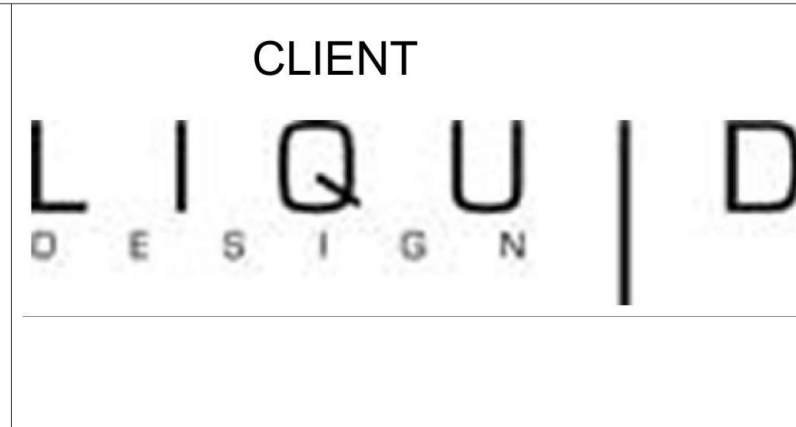


**SECTION - TYPICAL GRATED DRAIN**  
1:20

REVISION	AMENDMENT	ISSUE DATE	ISSUE
H	ISSUED FOR DA	04-04-2019	
G	AMENDED AS PER UPDATED PLANS	28-03-2019	
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**PROJECT**  
PROPOSED DEVELOPMENT  
51 JAMISON ROAD,  
KINGSWOOD

DRAWING TITLE		
STORMWATER SECTIONS AND DETAILS		
SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	EL
DRAWING NO.	APPROVED	REVISION
A9057 - SW04	JM	H

# PROPOSED BOARDING HOUSE 51 JAMISON ROAD, KINGSWOOD

## DEVELOPMENT APPLICATION

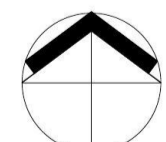
APRIL 2019

A0000	Cover	E
A0010	Site Plan / Site Analysis	D
A1000	DEMOLITION PLAN	E
A3001	PROPOSED NORTH & EAST ELEVATIONS	G
A3000	PROPOSED SOUTH & WEST ELEVATIONS	G
A4000	PROPOSED SECTIONS	G
A2001	PROPOSED GROUND FLOOR PLAN	G
A2002	PROPOSED LEVEL 1 PLAN	G
A2003	PROPOSED ROOF PLAN	G
A9100	FINISHES NOTES AND DETAILS	B
A9101	TYPICAL KITCHEN & JOINERY	B
A9000	3D VIEWS	G
A9102	SHADOWS AND AREAS	D
A9001	3D RENDER	A
A0011	CHARACTER ANALYSIS	E
A2000	PROPOSED BASEMENT	D



### LOCATION PLAN

SCALE BAR  
1:200 @ A1 - 1:400 @ A3  
0m 2 4 6 8 10m



NORTH

**NOTES:**  
READ DRAWINGS IN CONJUNCTION WITH SPECIFICATION - SEE A7000 SERIES FOR FINISHES AND SCHEDULES  
DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VERIFIED ON SITE

## DEVELOPMENT APPLICATION

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				PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	Cover	DM	CB	3329																								
						Date:	Issue:	Sheet No:																								
						JAN 2017	TENDER	A0000																								
						Scale:	Revision:																									
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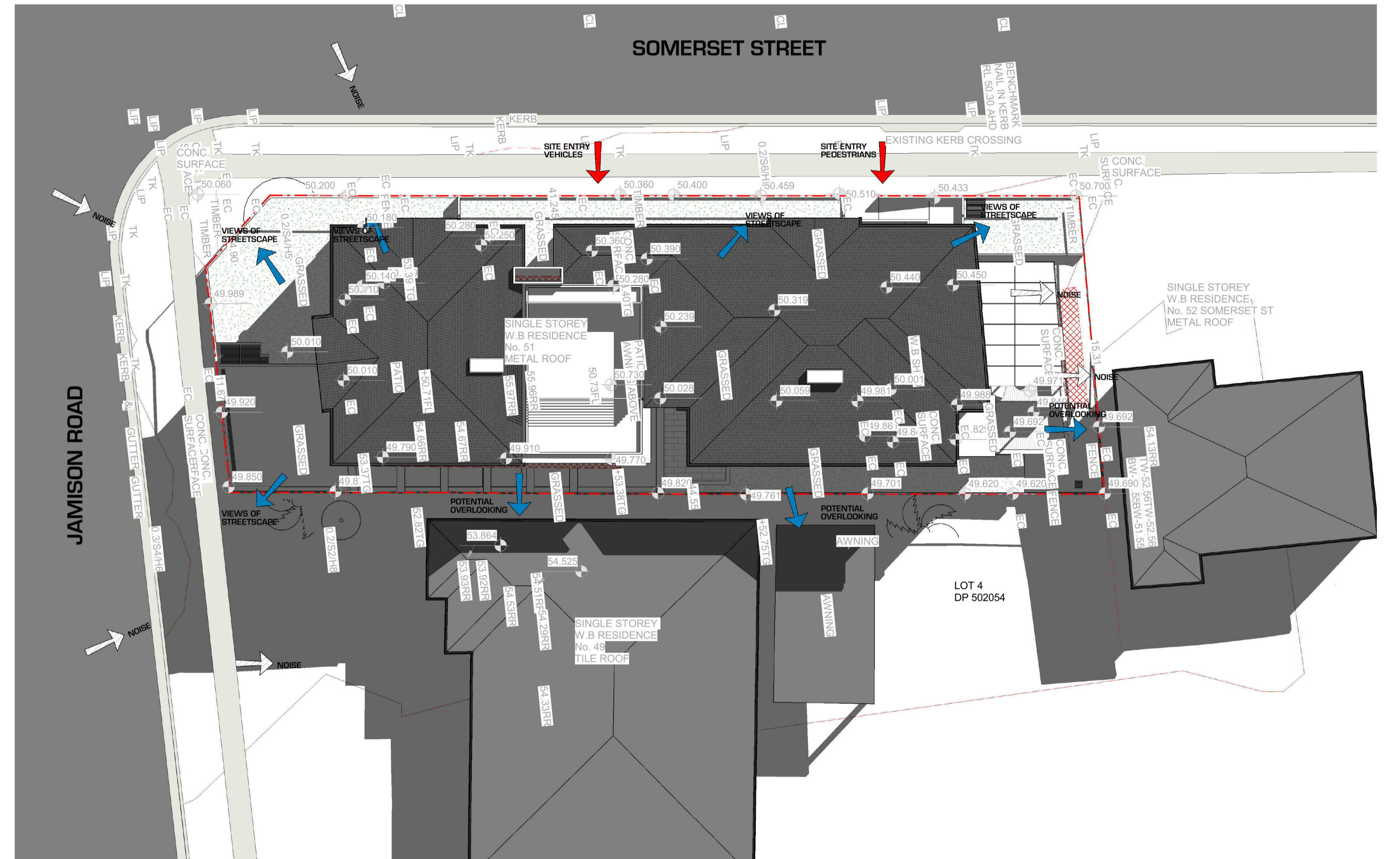
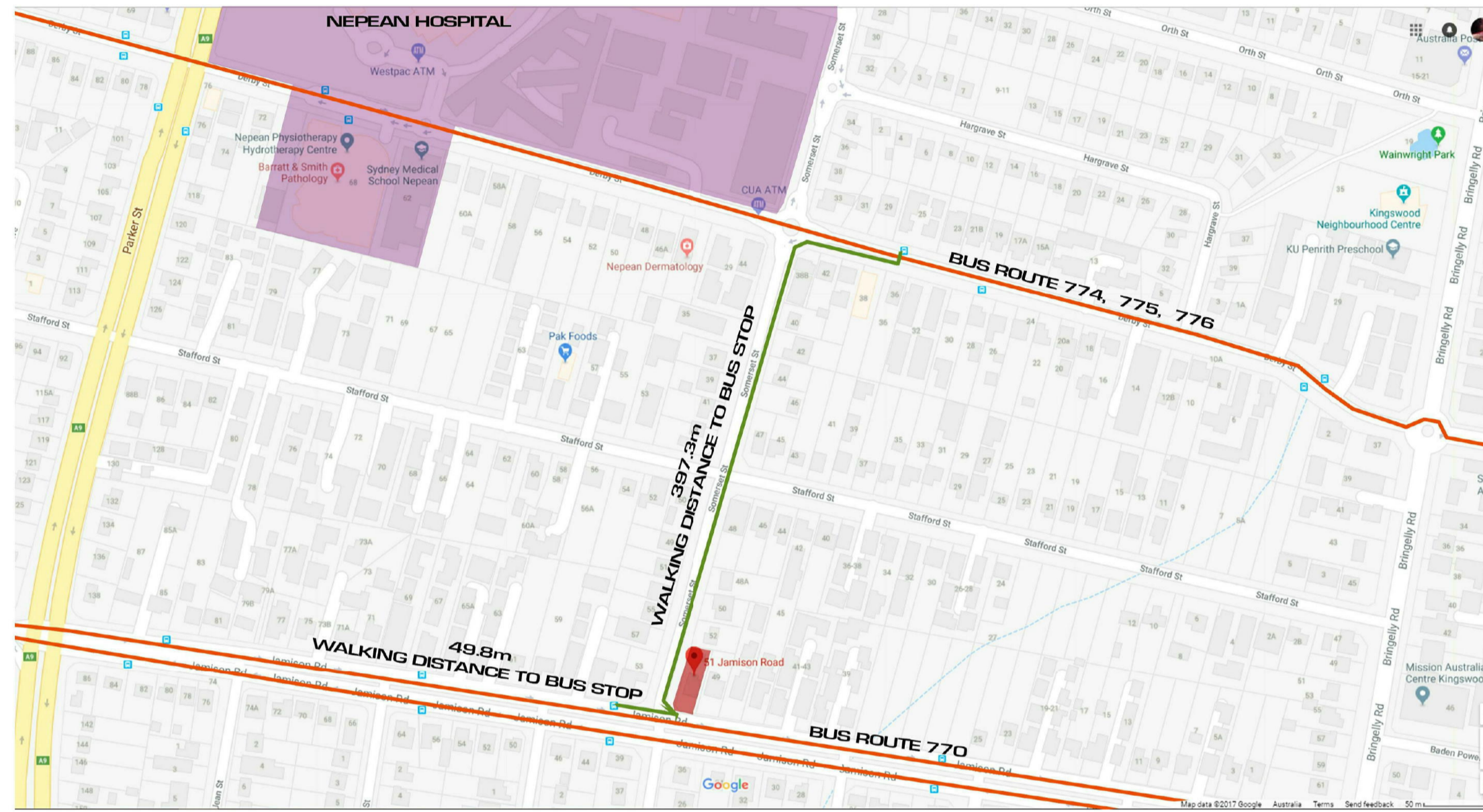
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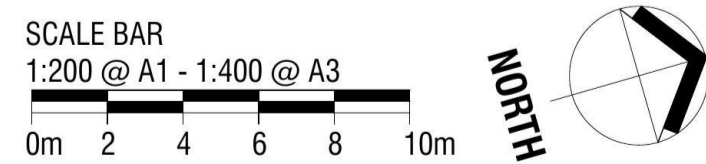
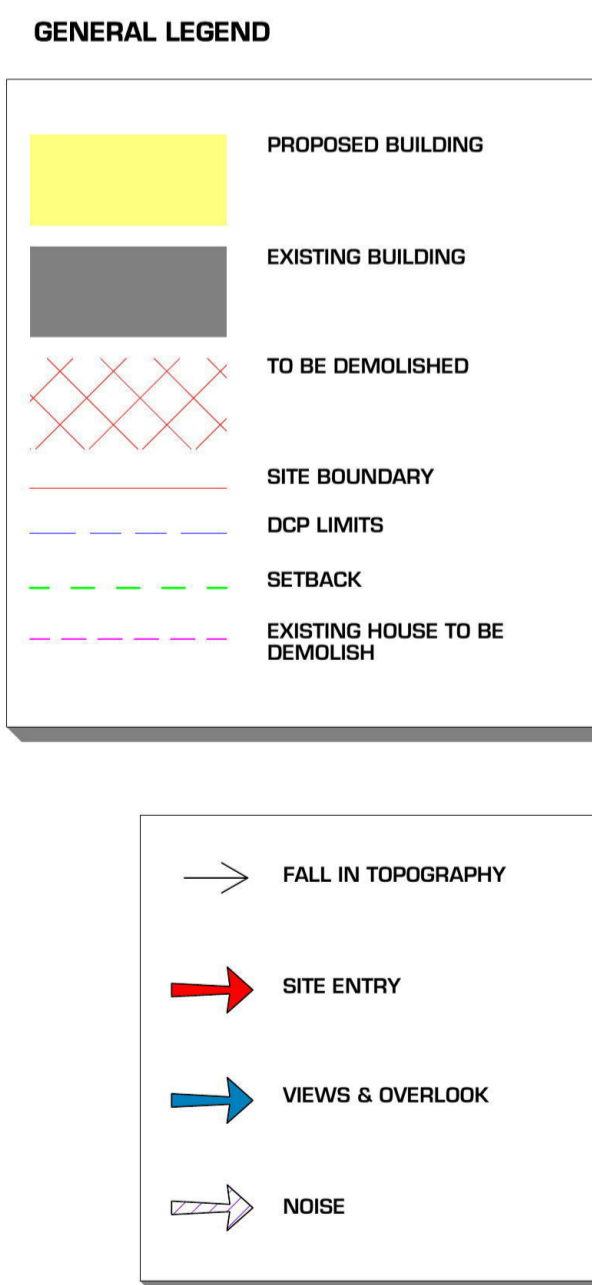
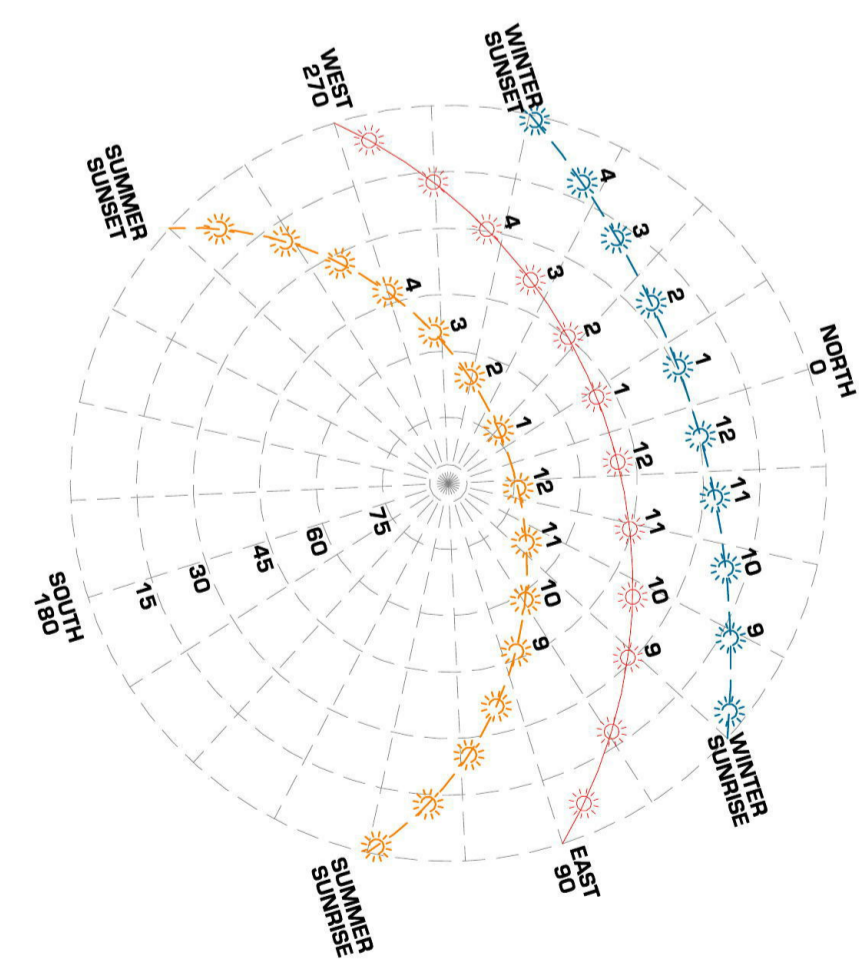
PANOTAMIC VIEW OF JAMISON RD LOOKING NORTH



PANOTAMIC VIEW OF SOMERSET STREET LOOKING EAST



1 SITE PLAN / SITE ANALYSIS  
1 : 150



**NOTES:**  
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# DEVELOPMENT APPLICATION

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		Version: 1, Version Date: 16/04/2019		As indicated		Issue: TENDER	Revision: D	Date: JAN 2017

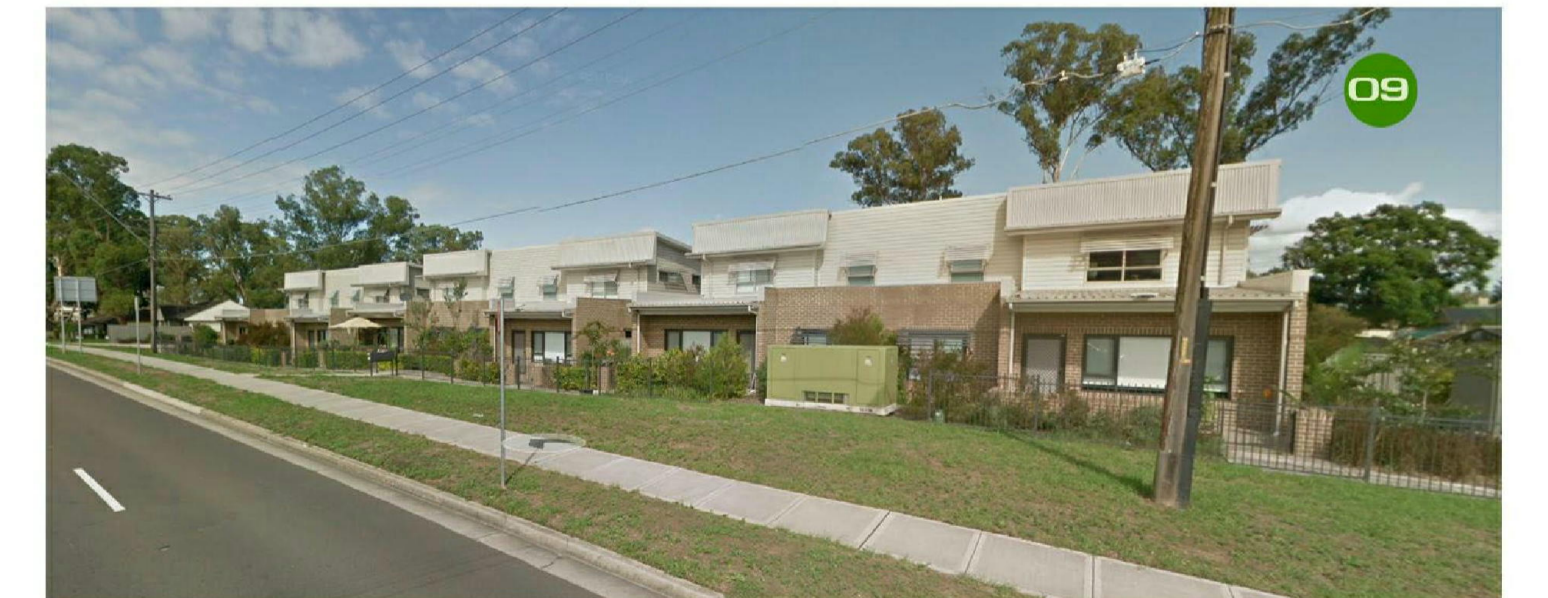
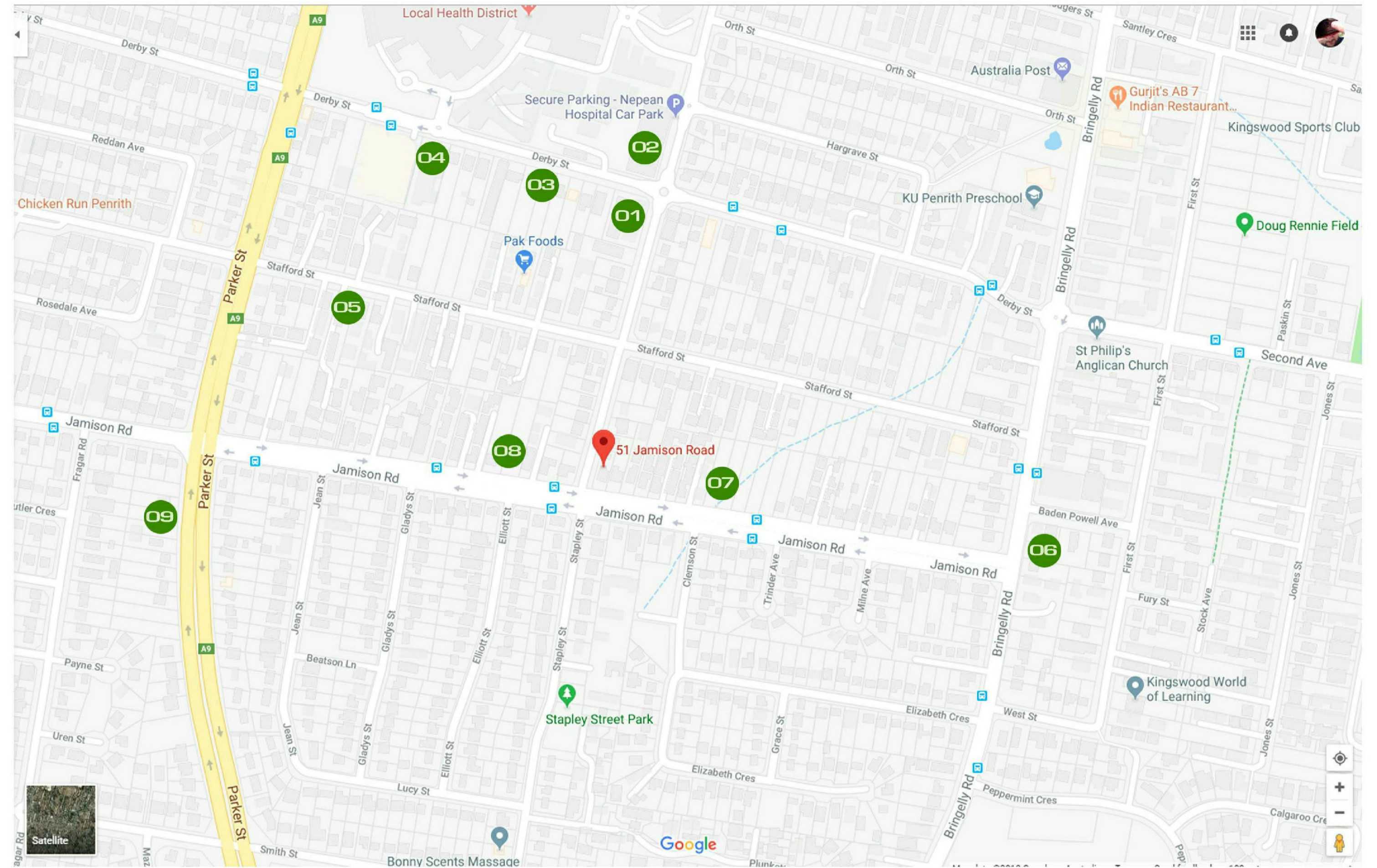
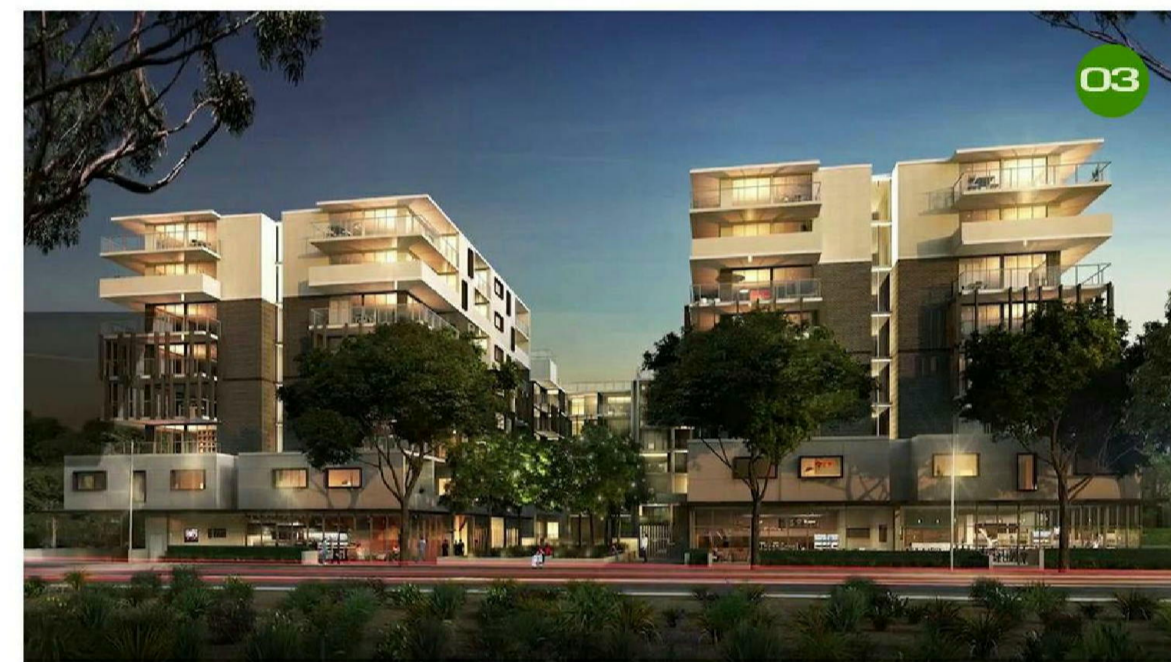
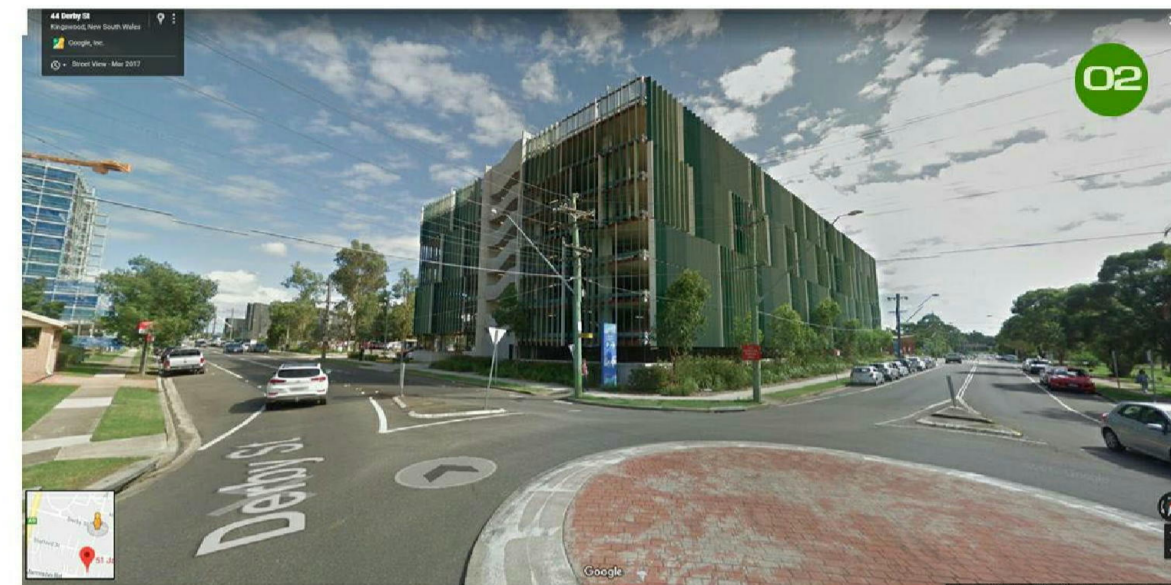
THIS PART OF KINGSWOOD IS RELATIVELY OLD. MOST OF THE HOUSES ARE 60'S AND 70'S COTTAGES. MANY OF THE COTTAGES ARE FIBRO. THERE ARE MANY HOUSES IN THIS AREA THAT ARE IN A STATE OF DIS-REPAIR.

ADJACENT ARE A COLLECTION OF IMAGES THAT SHOW SLIGHTLY NEWER BUILDINGS. WE HAVE TRIED TO CAPTURE IMAGES OF MORE DENSE DWELLING TYPES IN THE AREA AS WELL AS SOME BUILDINGS OF MORE CONTEMPORARY STYLE.

1. THIS IMAGE IS A SET OF TOWNHOUSE / VILLAS. THEY ARE BRICK CONSTRUCTION WITH PITCHED ROOF. THEY FIT IN WITH THE CHARACTER OF THE OLDER BUILDINGS BUT ARE RATHER JARRING AGAINST THE CAR PARKING STRUCTURE ACROSS THE ROAD
2. THE CAR PARKING STRUCTURE HAS A CONTEMPORARY FACADE TREATMENT. IT IS NOT RESIDENTIAL BUT THE STYLE SPELLS A CHANGING CHARACTER IN THE GREATER PENRITH AREA
3. THIS IS AN APARTMENT BUILDING. THIS BUILDING IS A CONTEMPORARY STYLE AND IS ALONG THE LINES OF THE FUTURE CHARACTER THAT THE PROPOSAL IS DESIGNED TO FIT IN WITH.
4. THIS IS A COMMERCIAL BUILDING NEAR THE HOSPITAL. THE PROPOSED DEVELOPMENT IS AIMED AT HOUSING STAFF THAT WORK IN THE HOSPITAL PRECINCT
5. THIS IMAGE IS A SET OF TOWNHOUSE / VILLAS. THEY ARE BRICK CONSTRUCTION WITH PITCHED ROOF. THEY FIT IN WITH THE CHARACTER OF THE OLDER BUILDINGS
6. THIS IMAGE IS A SET OF TOWNHOUSE / VILLAS. THEY ARE BRICK CONSTRUCTION WITH PITCHED ROOF. THEY FIT IN WITH THE CHARACTER OF THE OLDER BUILDINGS
7. THIS IMAGE IS A SET OF TOWNHOUSE / VILLAS. THEY ARE BRICK CONSTRUCTION WITH PITCHED ROOF. THEY FIT IN WITH THE CHARACTER OF THE OLDER BUILDINGS
8. THIS IMAGE IS A SET OF TOWNHOUSE / VILLAS. THEY ARE BRICK CONSTRUCTION WITH PITCHED ROOF. THEY FIT IN WITH THE CHARACTER OF THE OLDER BUILDINGS
9. THIS BUILDING IS A LITTLE MORE INTERESTING, IT HAS CONTEMPORARY FORM BUT USES MATERIALS COMPLEMENTING THE EXISTING CHARACTER. THE BLEND OF THE TWO IN THIS INSTANCE IS NOT DRAMATICALLY SUCCESSFUL

THE PROPOSED DEVELOPMENT HAS A CONTEMPORARY FORM AND IS DESIGNED TO SUIT A CHANGING CHARACTER IN THIS AREA. BRICKS HAVE BEEN PROPOSED AS ONE OF THE MAJOR MATERIALS, THESE WILL COMPLIMENT THE EXISTING OLDER BUILDINGS.

THE FORM AND THE SCALE OF THE DEVELOPMENT HAS BEEN REDUCED TO MATCH THE LOCAL TOWNHOUSE DEVELOPMENTS ON JAMISON RD AND IN THE SURROUNDING STREETS



SCALE BAR  
1:200 @ A1 - 1:400 @ A3  
0m 2 4 6 8 10m

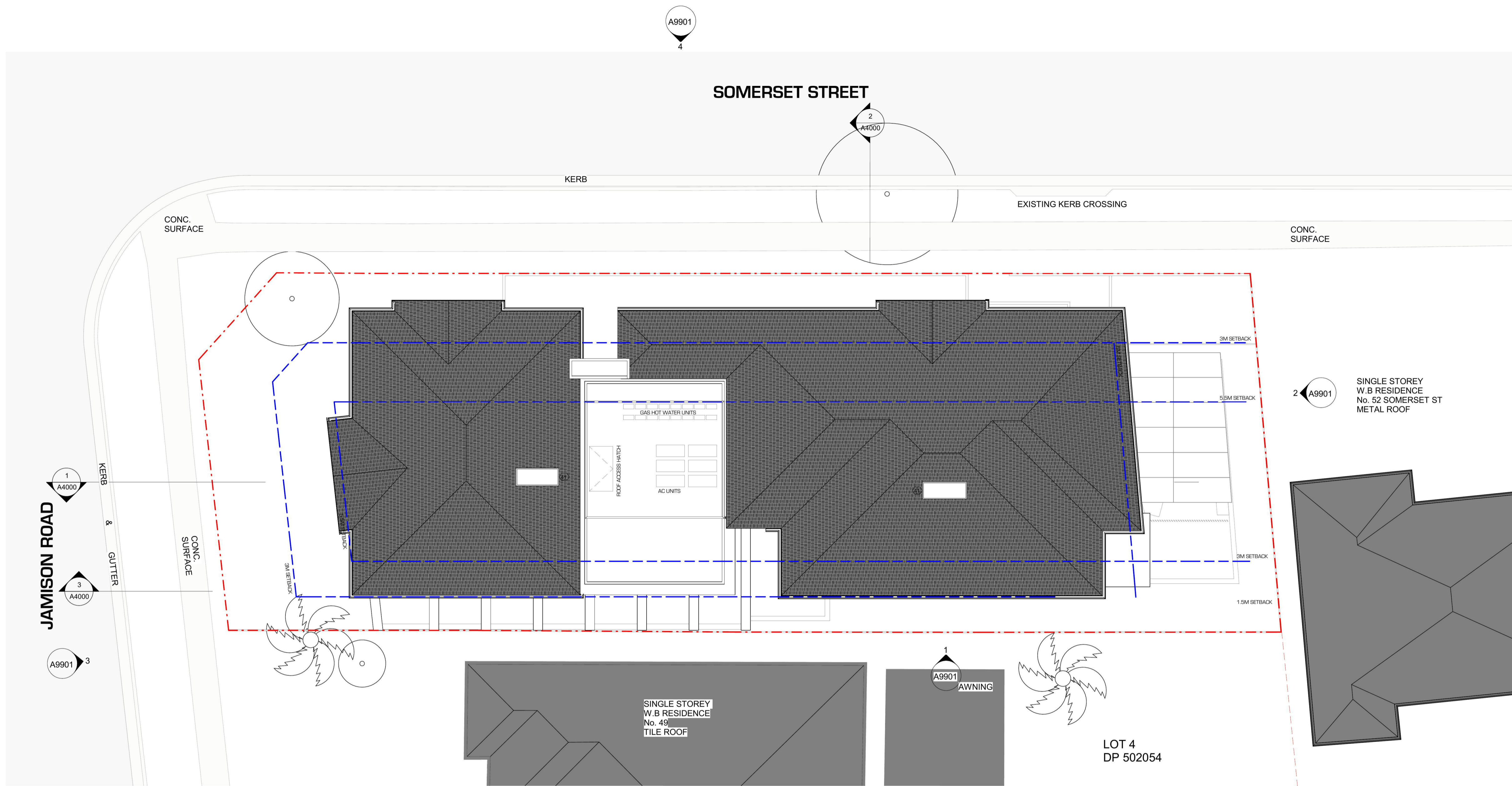
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# DEVELOPMENT APPLICATION

	Contractor:		Client:		Project: PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD		Title: CHARACTER ANALYSIS	
	Issue Rev. Date Description		Drawn By: DM		Checked: CB		Project No: 3329	
E 28/03/19 DA SUBMISSION		D 15/03/19 PRELIM DA		Date: JAN 2017		Sheet No: A0011		
C 22/02/19 DA COORDINATION		B 07/11/18 REVISED 16 ROOM DESIGN		Scale: TENDER		Revision: E		
A 14/09/18 PRE-DA SUBMISSION		It is intended that the drawings only represent the visual design of the work and any technical details are for outline purposes only. The contractor/manufacturer must separately provide all necessary shop drawings or calculations for compliance with any relevant industry, safety standards or regulations. All dimensions are to be checked on site and any discrepancies are to be referred to Liquid Design Pty Ltd in writing prior to proceeding. Dimensioned drawings are to take precedence over scaling. Check for latest revision issue. Copyright of this drawing is vested with Liquid Design Pty Ltd.						







ROOM SCHEDULE			
ROOM TYPE	ROOM #	SEPP RM AREA	TOTAL AREA
ACCESSIBLE ROOM	R1	20 m	33.5m <sup>2</sup>
SINGLE ROOM	R2	14 m	22.8m <sup>2</sup>
SINGLE ROOM	R3	14 m	22.8m <sup>2</sup>
SINGLE ROOM	R4	13 m	21.8m <sup>2</sup>
SINGLE ROOM	R5	14 m	22.8m <sup>2</sup>
MANAGERS ROOM	R6	13 m	22.5m <sup>2</sup>
ACCESSIBLE ROOM	R7	19 m	32.5m <sup>2</sup>
SINGLE ROOM	R8	13 m	21.8m <sup>2</sup>
SINGLE ROOM	R9	13 m	21.8m <sup>2</sup>
SINGLE ROOM	R10	13 m	21.8m <sup>2</sup>
SINGLE ROOM	R11	13 m	21.8m <sup>2</sup>
SINGLE ROOM	R12	15 m	23.8m <sup>2</sup>
SINGLE ROOM	R13	12 m	21.5m <sup>2</sup>
DOUBLE ROOM	R14	17 m	26.5m <sup>2</sup>
DOUBLE ROOM	R15	16 m	25.5m <sup>2</sup>
SINGLE ROOM	R16	13 m	22.5m <sup>2</sup>
Grand total: 16			

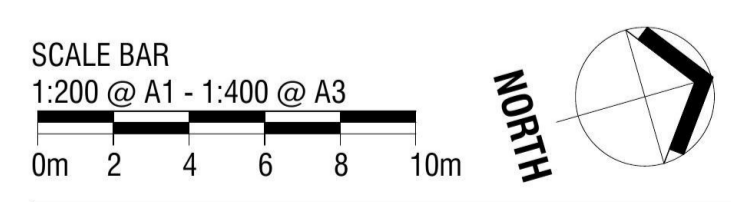
2 A9901  
SINGLE STOREY  
W.B RESIDENCE  
No. 52 SOMERSET ST  
METAL ROOF

SINGLE STOREY  
W.B RESIDENCE  
No. 49  
TILE ROOF

LOT 4  
DP 502054

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# DEVELOPMENT APPLICATION



**LIQUID DESIGN**

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ABN: 88 155 777 370

Issue	Rev.	Date	Description
G		28/03/19	DA SUBMISSION
F		15/02/19	PRELIM DA
E		22/02/19	DA COORDINATION
D		07/11/18	REVISED 16 ROOM DESIGN
C		14/08/18	PRE-DA SUBMISSION
B		05/08/18	PRE-DA COORDINATION
A		13/08/18	INITIAL CAD LAYOUTS

Contractor:


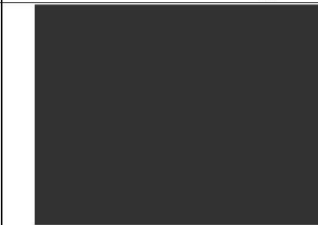



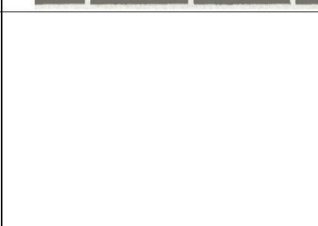
Client:

Project:  
**PROPOSED BOARDING HOUSE  
51 JAMISON RD  
KINGSWOOD**

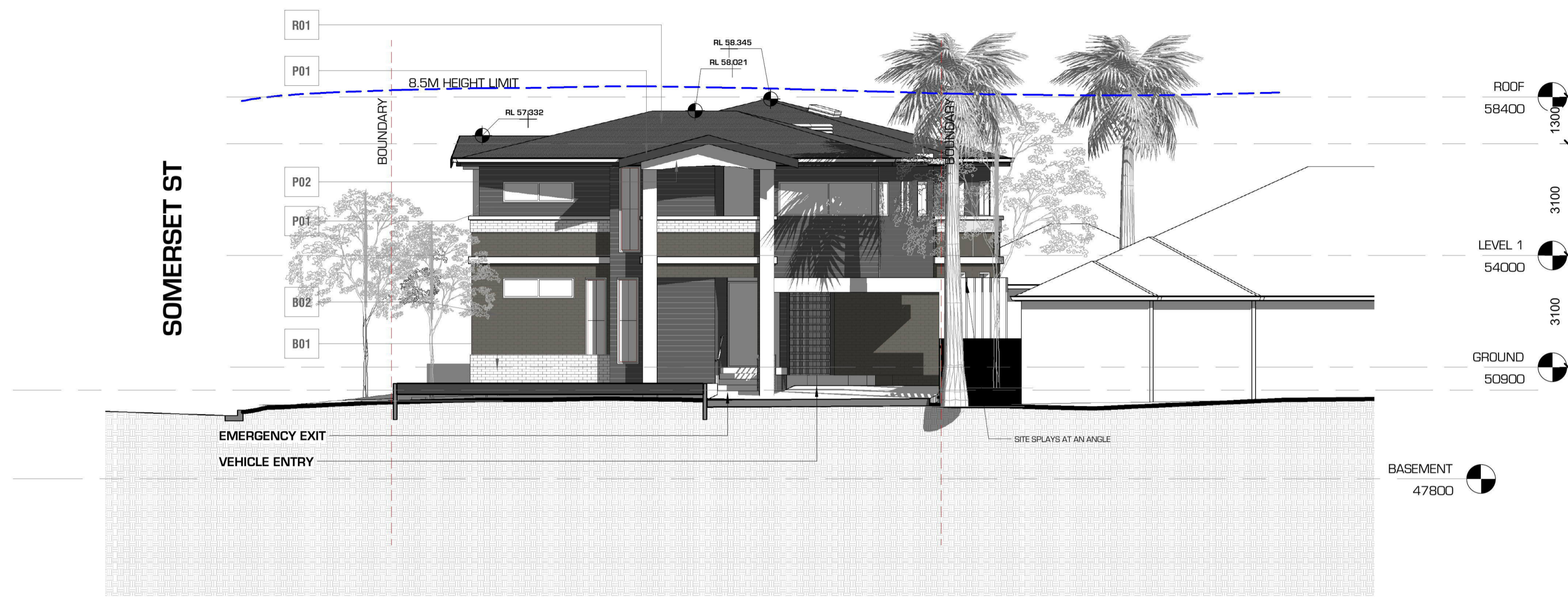
Title:  
**PROPOSED ROOF PLAN**

Drawn By: DM  
Checked: CB  
Project No: 3329  
Date: JAN 2017  
Sheet No: A2003  
Scale: 1 : 100  
Issue: TENDER  
Revision: G

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SCHEDULE OF COLOURS & MATERIALS		
LOCATION	CODE	IMAGE
ROOF MONIER- CAMBRIDGE SOHO NIGHT	R01	
METAL WORK & WEATHERBOARD WALLS DULUX/COLORBOND MONUMENT	P01	
RENDERED FEATURES & LANDSCAPE WALLS DULUX - WHITSUNDAY ISLAND	P02	
LIGHT BRICKS AUSTRAL MAGESTIC GREY	B01	
DARK BRICKS AUSTRAL SUBLIME STEEL	B02	
TIMBER SPOTTED GUM	T01	

ROOM SCHEDULE			
ROOM TYPE	ROOM #	SEPP RM AREA	TOTAL AREA
ACCESSIBLE ROOM	R1	20 m	33.5m2
SINGLE ROOM	R2	14 m	22.8m2
SINGLE ROOM	R3	14 m	22.8m2
SINGLE ROOM	R4	13 m	21.8m2
SINGLE ROOM	R5	14 m	22.8m2
MANAGERS ROOM	R6	13 m	22.5m2
ACCESSIBLE ROOM	R7	19 m	32.5m2
SINGLE ROOM	R8	13 m	21.8m2
SINGLE ROOM	R9	13 m	21.8m2
SINGLE ROOM	R10	13 m	21.8m2
SINGLE ROOM	R11	13 m	21.8m2
SINGLE ROOM	R12	15 m	23.8m2
SINGLE ROOM	R13	12 m	21.5m2
DOUBLE ROOM	R14	17 m	26.5m2
DOUBLE ROOM	R15	16 m	25.5m2
SINGLE ROOM	R16	13 m	22.5m2
Grand total: 16			



1 SOUTH ELEVATION (JAMISON RD)  
1 : 100




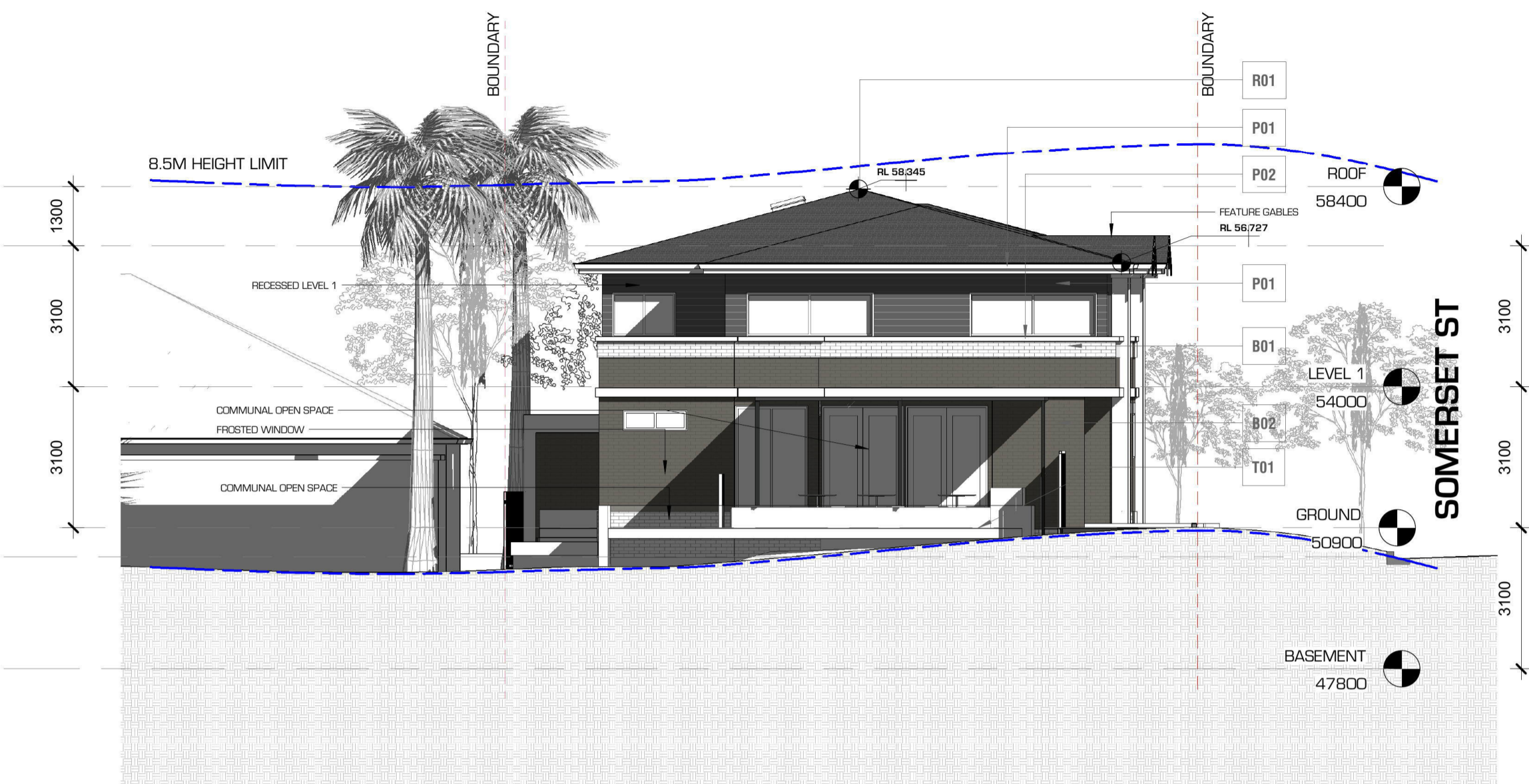
2 WEST ELEVATION (SOMERSET ST)  
1 : 100

SCALE BAR  
1:200 @ A1 - 1:400 @ A3  
0m 2 4 6 8 10m

NOTES:  
READ DRAWINGS IN CONJUNCTION WITH SPECIFICATION - SEE A7000 SERIES FOR FINISHES AND SCHEDULES  
DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VERIFIED ON SITE

# DEVELOPMENT APPLICATION

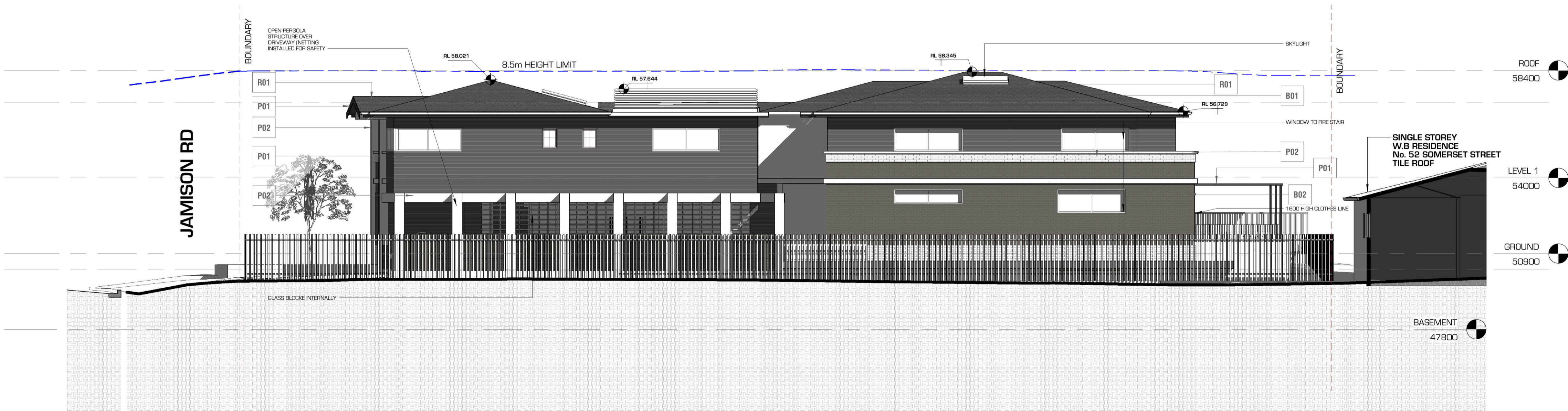
 Liquid Design Pty Ltd Suite 5, 17, 25 Miller Street, Pyrmont, Sydney, NSW, 2009 T: +61 2 7501 1215 E: info@liquiddesign.com.au W: www.liquiddesign.com.au ABN: 88 155 777 370	G 28/03/19 DA SUBMISSION F 15/02/19 PRELIM DA E 22/02/19 DA COORDINATION D 07/11/18 REVISED 16 ROOM DESIGN C 14/08/18 PRE-DA SUBMISSION B 05/08/18 PRE-DA COORDINATION A 13/08/18 INITIAL CAD LAYOUTS	Issue Rev. Date Description	Contractor:	Client:	Project: PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	Title: PROPOSED SOUTH & WEST ELEVATIONS	Drawn By: DM	Checked: CB	Project No: 3329	
								Date: JAN 2017	Sheet No: A3000	
								Scale: As indicated	Issue: TENDER	Revision: G
	It is intended that the drawings only represent the visual design of the work and any technical details are for outline purposes only. The contractor/manufacturer must separately provide all necessary shop drawings or calculations for compliance with any relevant industry, safety standards or regulations. All dimensions are to be checked on site and any discrepancies are to be referred to Liquid Design Pty Ltd in writing prior to proceeding. Dimensioned drawings are to take precedence over scaling. Check for latest revision issue. Copyright of this drawing is vested with Liquid Design Pty Ltd.									



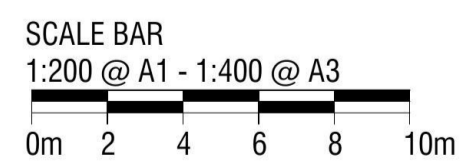
1 NORTH ELEVATION  
1 : 100

SCHEDULE OF COLOURS & MATERIALS		
LOCATION	CODE	IMAGE
ROOF MONIER- CAMBRIDGE SOHO NIGHT	R01	
METAL WORK & WEATHERBOARD WALLS DULUX/COLORBOND MONUMENT	P01	
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SINGLE ROOM	R5	14 m	22.8m2
MANAGERS ROOM	R6	13 m	22.5m2
ACCESSIBLE ROOM	R7	19 m	32.5m2
SINGLE ROOM	R8	13 m	21.8m2
SINGLE ROOM	R9	13 m	21.8m2
SINGLE ROOM	R10	13 m	21.8m2
SINGLE ROOM	R11	13 m	21.8m2
SINGLE ROOM	R12	15 m	23.8m2
SINGLE ROOM	R13	12 m	21.5m2
DOUBLE ROOM	R14	17 m	26.5m2
DOUBLE ROOM	R15	16 m	25.5m2
SINGLE ROOM	R16	13 m	22.5m2
Grand total:	16		



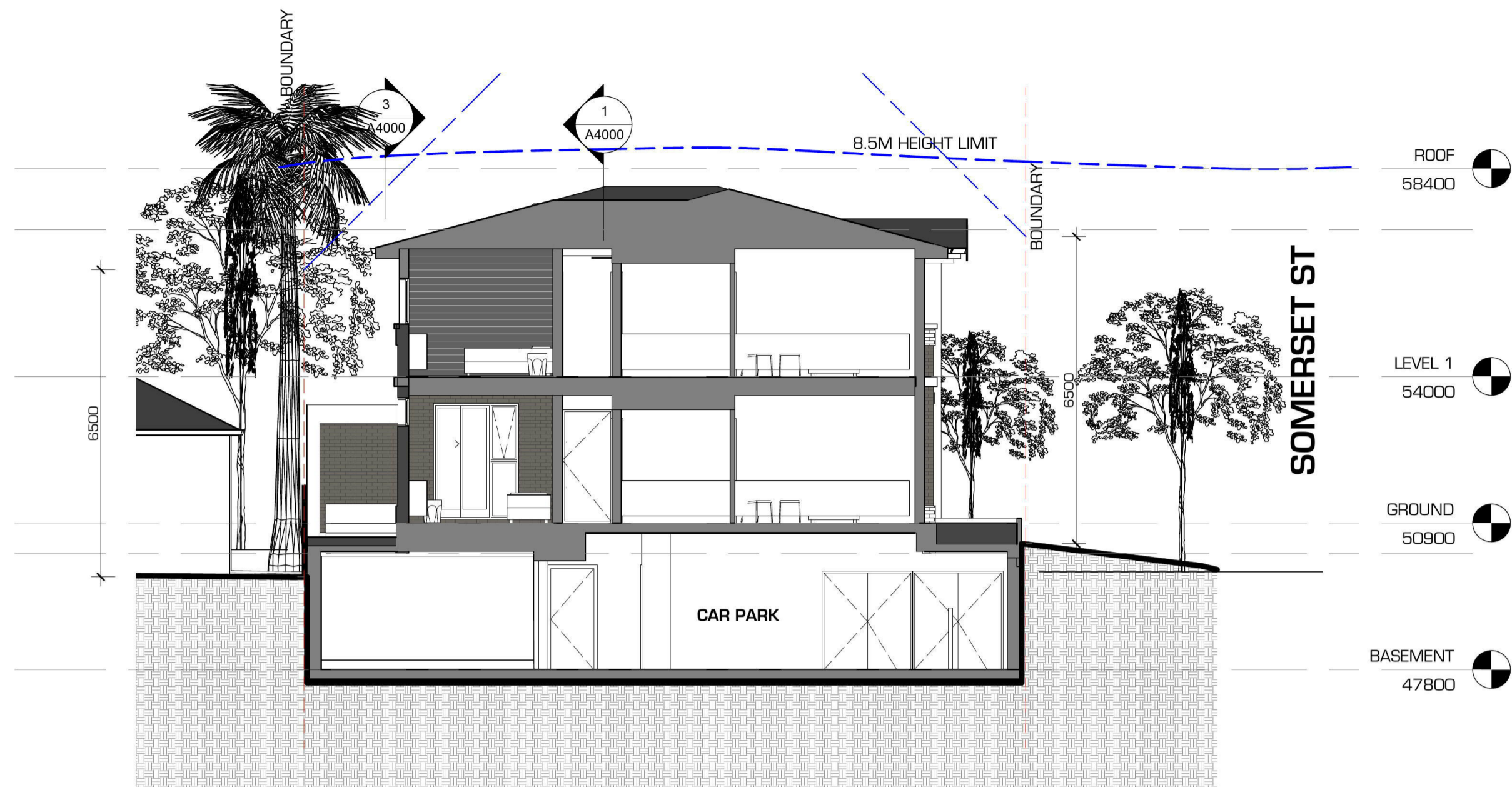
2 EAST ELEVATION  
1 : 100



NOTES:  
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DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VARIFIED ON SITE

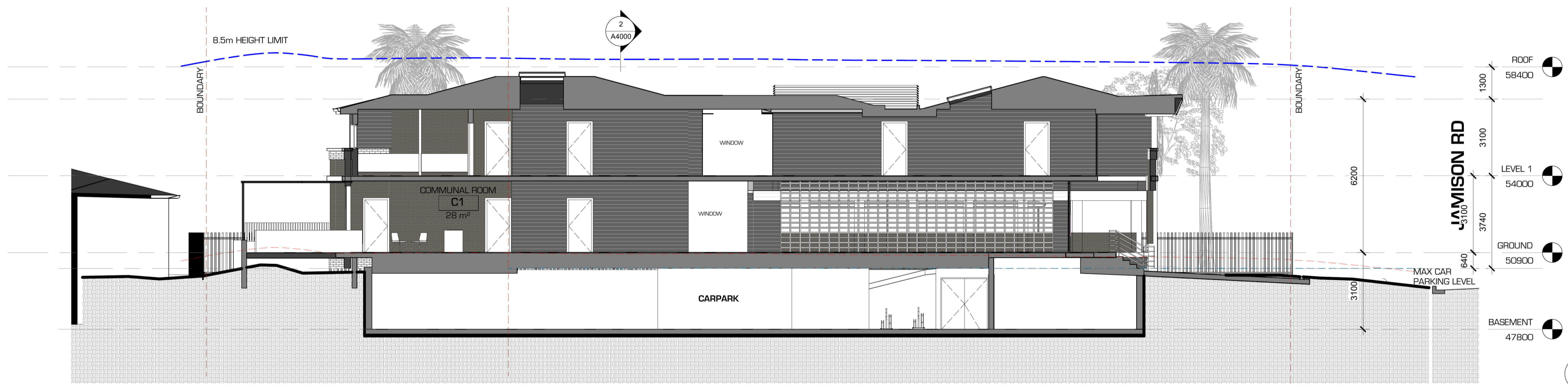
# DEVELOPMENT APPLICATION

<p>Liquid Design Pty Ltd Suite 5, 17, 25 Miller Street, Pyrmont, Sydney, NSW, 2009 T: +61 2 7501 1215 E: info@liquiddesign.com.au W: www.liquiddesign.com.au ABN: 88 155 777 370</p>	<p>Issue Rev. Date Description</p> <table border="1"> <tr><td>G</td><td>28/03/19</td><td>DA SUBMISSION</td></tr> <tr><td>F</td><td>15/02/19</td><td>PRELIM DA</td></tr> <tr><td>E</td><td>22/02/19</td><td>DA COORDINATION</td></tr> <tr><td>D</td><td>07/11/18</td><td>REVISED 16 ROOM DESIGN</td></tr> <tr><td>C</td><td>14/08/18</td><td>PRE-DA SUBMISSION</td></tr> <tr><td>B</td><td>05/06/18</td><td>PRE-DA COORDINATION</td></tr> <tr><td>A</td><td>13/09/18</td><td>INITIAL CAD LAYOUTS</td></tr> </table>	G	28/03/19	DA SUBMISSION	F	15/02/19	PRELIM DA	E	22/02/19	DA COORDINATION	D	07/11/18	REVISED 16 ROOM DESIGN	C	14/08/18	PRE-DA SUBMISSION	B	05/06/18	PRE-DA COORDINATION	A	13/09/18	INITIAL CAD LAYOUTS	Contractor:	Client:	Project:	Title:	Drawn By:	Checked:	Project No:
		G	28/03/19	DA SUBMISSION																									
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				PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	PROPOSED NORTH & EAST ELEVATIONS	DM	CB	3329																					
						Date:		Sheet No:																					
						JAN 2017		A3001																					
						Scale:	Issue:	Revision:																					
						As indicated	TENDER	G																					
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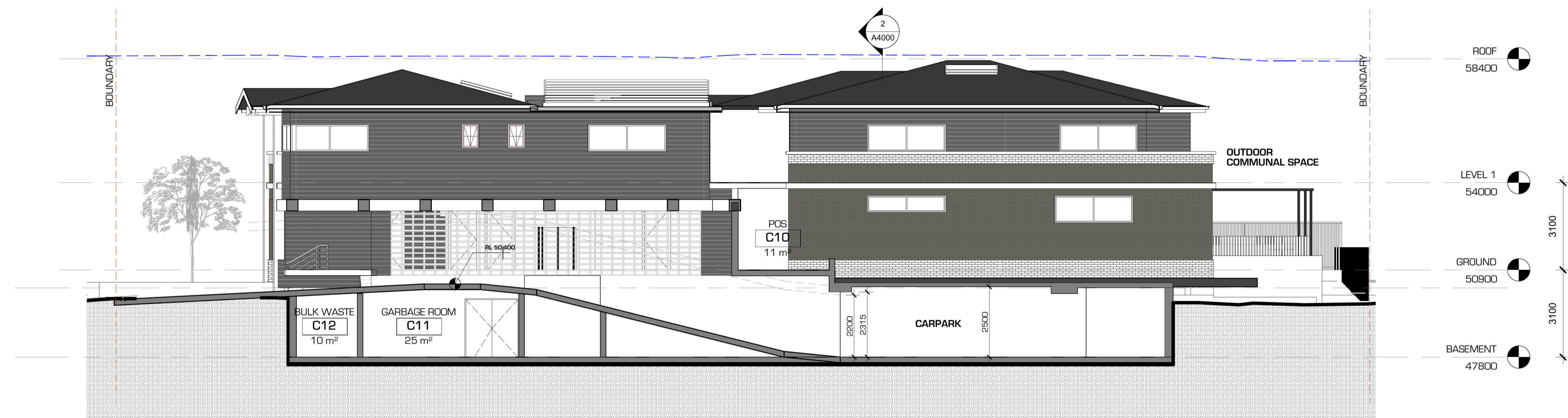


2 CROSS SITE SECTION  
1: 100

ROOM SCHEDULE			
ROOM TYPE	ROOM #	SEPP RM AREA	TOTAL AREA
ACCESSIBLE ROOM	R1	20 m	33.5m <sup>2</sup>
SINGLE ROOM	R2	14 m	22.8m <sup>2</sup>
SINGLE ROOM	R3	14 m	22.8m <sup>2</sup>
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SINGLE ROOM	R11	13 m	21.8m <sup>2</sup>
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SINGLE ROOM	R13	12 m	21.5m <sup>2</sup>
DOUBLE ROOM	R14	17 m	26.5m <sup>2</sup>
DOUBLE ROOM	R15	16 m	25.5m <sup>2</sup>
SINGLE ROOM	R16	13 m	22.5m <sup>2</sup>
Grand total: 16			



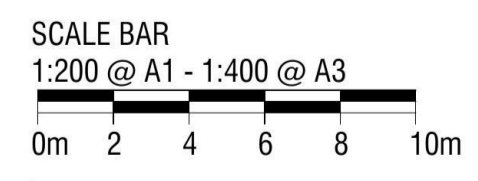
1 LONG SITE SECTION  
1: 100



3 LONG SITE SECTION 1  
1: 100

NOTES:  
READ DRAWINGS IN CONJUNCTION WITH SPECIFICATION - SEE A7000 SERIES FOR FINISHES AND SCHEDULES  
DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VERIFIED ON SITE

# DEVELOPMENT APPLICATION



**LIQUID DESIGN**

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 ABN: 99 155 777 370

Issue	Rev.	Date	Description
G	28/03/19		DA SUBMISSION
F	15/03/19		PRELIM DA
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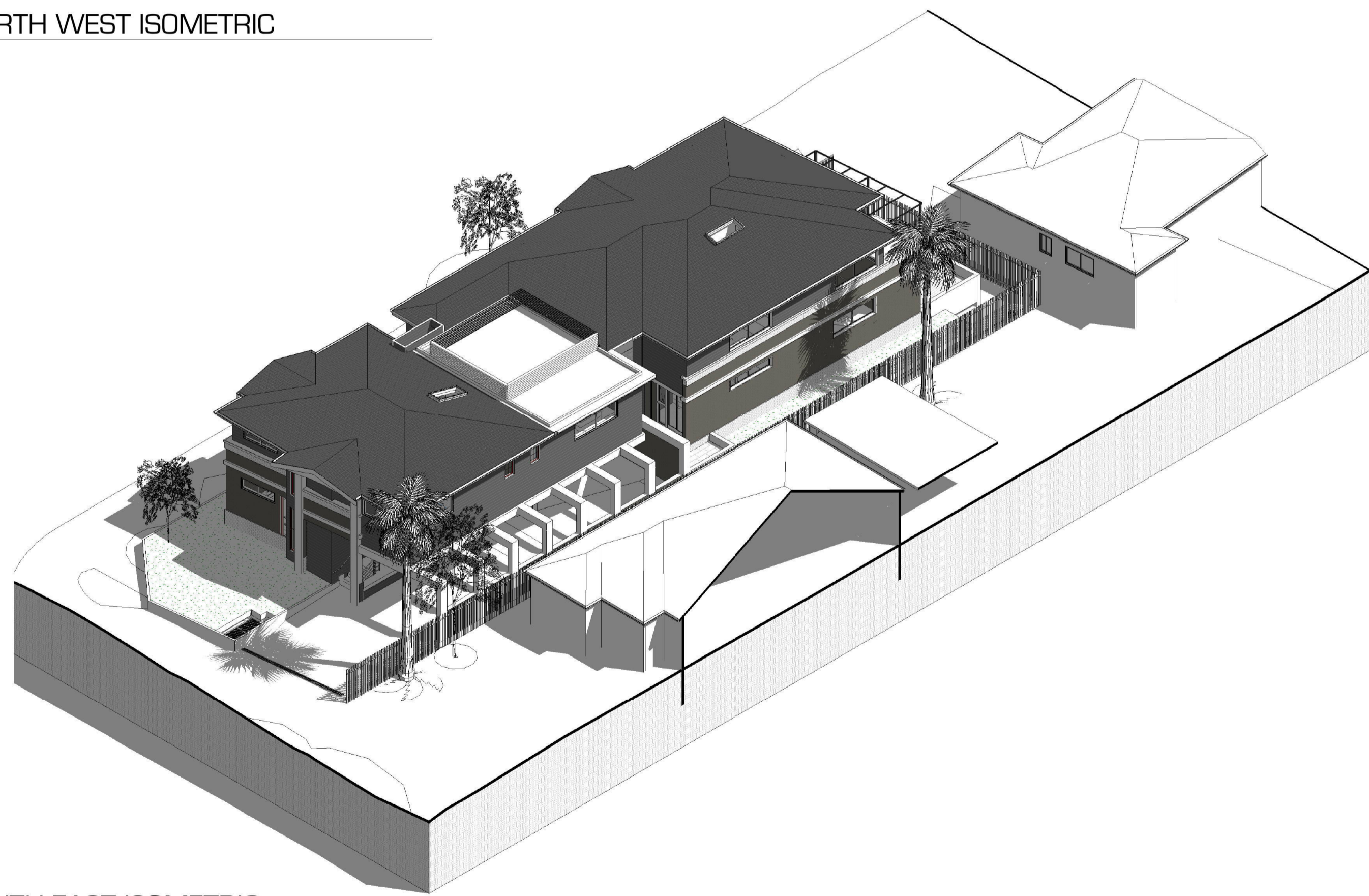
Contractor:	Client:	Project:	Title:
		PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	PROPOSED SECTIONS

Drawn By:	Checked:	Project No:
DM	CB	3329
Date:	Sheet No:	
JAN 2017	A4000	
Scale:	Issue:	Revision:
1: 100	TENDER	G

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3 NORTH WEST ISOMETRIC



2 SOUTH EAST ISOMETRIC

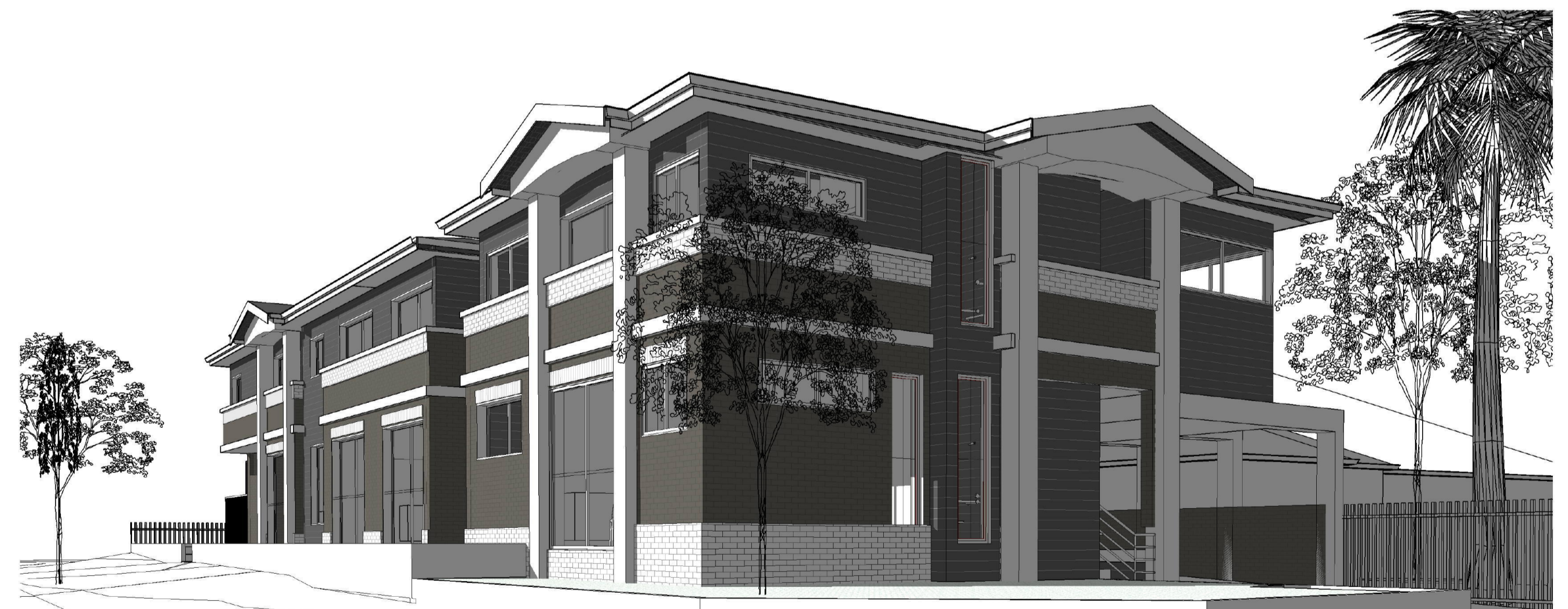
SCALE BAR  
1:200 @ A1 - 1:400 @ A3  
0m 2 4 6 8 10m



1 VIEW FROM 49 JAMISON REAR YARD



5 ENTRY PERSPECTIVE



4 JAMISON RD 3D

NOTES:  
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# DEVELOPMENT APPLICATION

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B		05/08/18	PRE-DA COORDINATION
A		13/08/18	INITIAL CAD LAYOUTS

Contractor:

Client:

Project:

PROPOSED BOARDING HOUSE  
51 JAMISON RD  
KINGSWOOD

Title:

3D VIEWS

Drawn By:

DM

Checked:

CB

Project No:

3329

Date:

JAN 2017

Sheet No:

A9000

Scale:

TENDER

Revision:

G

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VISUALISATION FROM CORNER OF JAMISON RD & SOMERSET ST



VISUALISATION FROM NORTHWEST ON SOMERSET ST

**NOTES:**  
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 DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VERIFIED ON SITE

# DEVELOPMENT APPLICATION

SCALE BAR  
 1:200 @ A1 - 1:400 @ A3  
 0m 2 4 6 8 10m

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	A 2019 04 16 Issue Rev. Date Description					PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	3D RENDER	DM	CB
									Sheet No:
									A9001
									Revision:
									A
<small>It is intended that the drawings only represent the visual design of the work and any technical details are for outline purposes only. The contractor/manufacturer must separately provide all necessary shop drawings or calculations for compliance with any relevant industry, safety standards or regulations. All dimensions are to be checked on site and any discrepancies are to be referred to Liquid Design Pty Ltd in writing prior to proceeding. Dimensioned drawings are to take precedence over scaling. Check for latest revision issue. Copyright of this drawing is vested with Liquid Design Pty Ltd.</small>									



Window Schedule						
Mark	Room Number	Level	Height	Width	Sill Height	Comments
1	R6	GROUND	600	2800	2050	
2	FS	GROUND	980	2800	1670	
3	COMM WC	GROUND	450	1400	2150	
4	COMM RM	GROUND	2700	1600	0	
6	COMM RM	GROUND	600	2000	1100	
7	R5	GROUND	2500	2800	0	
8	R4	GROUND	1980	1400	548	
9	R3	GROUND	2500	2800	0	
10	R2	GROUND	2500	2800	0	
11	FS	GROUND	980	2200	1548	
12	R1	GROUND	2500	2800	0	
13	R1	GROUND	980	1400	1548	
14	R1	GROUND	600	2000	1910	
15	R1	GROUND	2410	600	100	
16	R1	GROUND	2410	600	100	
18	R14	LEVEL 1	980	2800	1100	
19	FS	LEVEL 1	980	2800	1100	
20	FS	LEVEL 1	980	1400	1100	
21	R13	LEVEL 1	980	2800	1100	
22	R12	LEVEL 1	980	2800	1100	
23	R12	LEVEL 1	980	1400	1100	
24	R11	LEVEL 1	980	2800	1100	
25	R10	LEVEL 1	980	1400	1100	
26	R9	LEVEL 1	980	2800	1100	
27	R8	LEVEL 1	980	2800	1100	
28	FS	LEVEL 1	980	2200	1100	
29	R7	LEVEL 1	980	2800	1100	
30	R7	LEVEL 1	980	1400	1100	
31	R7	LEVEL 1	600	2000	1480	
32	R7	LEVEL 1	2410	600	100	
34	R16	LEVEL 1	980	2800	1100	
35	R16	LEVEL 1	980	2800	1100	
36	R16	LEVEL 1	850	600	1230	
37	R15	LEVEL 1	850	600	1230	
38	R15	LEVEL 1	980	2800	1100	
SK1		LEVEL 2	1830	711		SKYLIGHT
SK2		LEVEL 2	1830	711		SKYLIGHT

Door Schedule					
Door #	Number	Level	Height	Width	Comments
D2	COMM RM	GROUND	2700	1800	
D1	R6	GROUND	2450	1800	
D3	COMM RM	GROUND	2700	1800	
D5	EXIT	GARBAGE ROOM	2395	1055	
D4	ENTRY	GARBAGE ROOM	2395	990	

SCHEDULE OF COLOURS & MATERIALS		
LOCATION	CODE	IMAGE
ROOF MONIER, CAMBRIDGE SOHO NIGHT	R01	
METAL WORK & WEATHERBOARD WALLS DULUX / COLOURBOND MONUMENT	P01	
RENDERED FEATURES & LANDSCAPE WALLS DULUX WHITSUNDAY ISLAND	P02	
LIGHT BRICKS AUSTRAL MAGNETIC GREY	B01	
DARK BRICKS AUSTRAL SUBLIME STEEL	B02	
TIMBER SPOTTED GUM	T01	

**SECTION J NOTES:**

**BUILDING FABRIC - INTEGRITY OF THE INSULATION**  
ANY INSULATION MUST BE INSTALLED SO THAT IT ABUTS OR OVERLAPS ADJOINING INSULATION, FORMS A CONTINUOUS BARRIER WITH CEILINGS, WALLS, BULKHEADS, FLOORS OR THE LIKE AND DOES NOT AFFECT THE SAFE OR EFFECTIVE OPERATION OF A SERVICE OR FITTING.

**BUILDING FABRIC - REFLECTIVE INSULATION**  
REFLECTIVE INSULATION MUST BE INSTALLED TO ACHIEVE THE REQUIRED R-VALUE BETWEEN A REFLECTIVE SIDE OF THE REFLECTIVE INSULATION AND A BUILDING LINING OR GLAZING. IT MUST BE CLOSELY FITTED AGAINST ANY PENETRATING DOOR OR WINDOW OPENING, ADEQUATELY SUPPORTED AND OVERLAPPED NOT LESS THAN 50MM OR TAPED TOGETHER.

**BUILDING FABRIC - BULK INSULATION**  
BULK INSULATION MUST BE INSTALLED SO THAT IT MAINTAINS ITS POSITION AND THICKNESS AND IN A CEILING WHERE THERE IS NO BULK OR REFLECTIVE INSULATION IN THE WALL BENEATH, IT OVERLAPS THE WALL BY NOT LESS THAN 50MM.

**CEILING**  
PROVIDE A MINIMUM R2.55 INSULATION TO THE FOLLOWING CEILINGS:  
A. REAR PORTION OF ROOM 8 CEILING ON THE GROUND FLOOR OF THE REAR BUILDING THAT IS NOT BELOW A CONDITIONED AREA.  
B. ALL OF THE CEILINGS TO LEVEL 3 REAR BUILDING AND LEVEL 4 FRONT BUILDING.

**EXTERNAL WALLS**  
PROVIDE CAVITY INSULATION OF MIN R1.77 TO ALL EXTERNAL DOUBLE BRICK WALLS. INSULATION TO LIGHT WEIGHT WALLS TO BE HIGHER RATED MASS INSULATION.

**INTERNAL WALLS**  
PROVIDE INSULATION OF MINIMUM R1.19 TO ALL INTERNAL CONCRETE WALLS SEPARATING THE CONDITIONED AREAS FROM THE NON CONDITIONED AREAS.

**FLOORS**  
PROVIDE INSULATION OF MINIMUM R1.25 TO THE FOLLOWING FLOORS:  
A. ALL OF THE CONDITIONED AREAS ON THE GROUND FLOOR OF BOTH BUILDINGS ABOVE THE GARAPARK.  
B. THOSE PARTS OF FLOORS TO ROOMS 14, 15 & 16 ON LEVEL 1 (FRONT BUILDING) ABOVE THE DRIVEWAY.

**GLAZING**  
PROVIDE GLAZING TO ALL WINDOWS AND GLASS DOORS OF THE CONDITIONED AREAS THAT HAVE THE U-VALUE AND SHGC VALUES AS NOMINATED IN SECTION J REPORT AND WINDOW SCHEDULE A8400 & A8401.

**OPENABLE WINDOWS & DOORS**  
PROVIDE SEALS TO ANY OPENABLE WINDOWS AND DOORS WITHIN THE CONDITIONED AREAS AS MENTIONED IN B.1.3 OF SECTION J REPORT.

**ENTRY DOOR**  
THE MAIN ENTRY DOOR TO THE GROUND FLOOR LOBBY SHALL BE A SELF-CLOSING DOOR WITH A DRAFT PROTECTION DEVICE ATTACHED TO THE UNDERSIDE OF THE DOOR.

**EXHAUST FANS**  
ANY MISCELLANEOUS EXHAUST FAN SUCH AS A BATHROOM EXHAUST FAN MUST BE FITTED WITH A SEALING DEVICE SUCH AS A SELF-CLOSING DAMPER OR THE LIKE WHEN SERVING A CONDITIONED AREA.

**EVAPORATIVE COOLER**  
ANY EVAPORATIVE COOLER MUST BE FITTED WITH A SELF-CLOSING DAMPER OR THE LIKE WHEN SERVING A HEATED SPACE OR AN HABITABLE ROOM OR A PUBLIC AREA OF THE CONDITIONED AREAS.

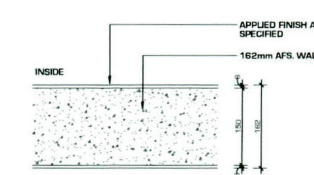
**INTERNAL LININGS**  
ALL INTERNAL LININGS TO THE CONDITIONED AREAS SHALL BE CLOSE FITTING AT THE JUNCTION OF CEILING WALL AND FLOORS OR SEALED BY CAULKING SKIRTING, ARCHITRAVES CORNICES OR THE LIKE.

**MECHANICAL VENTILATION/AIR CONDITIONING**  
ANY AIR-CONDITIONING OR MECHANICAL VENTILATION SYSTEM TO THE CONDITIONED AREAS MUST COMPLY WITH THE REQUIREMENTS OUTLINED IN A HEADING 10.0 OF SECTION J REPORT.

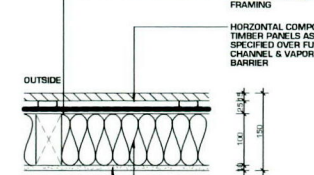
**LIGHTING AND POWER**  
LIGHTING AND POWER TO THE BUILDING SHALL COMPLY WITH THE REQUIREMENTS OUTLINED IN HEADING 11 AND HEADING 2 OF SECTION J REPORT.

**HEATED WATER SUPPLY**  
ANY HEATED WATER SUPPLY FOR FOOD PREPARATION AND SANITARY PURPOSES MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH PART B2 OF NCC VOLUME 3 - PLUMBING CODE OF AUSTRALIA.

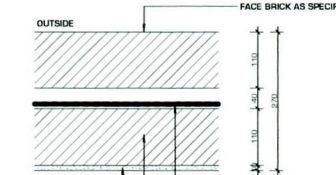
**GAS AND ELECTRICITY**  
THE BUILDING MUST HAVE THE FACILITY TO RECORD THE CONSUMPTION OF GAS AND ELECTRICITY.



**WALL TYPE A**  
SCALE 1:5  
PARTY WALL WITH PAINT FINISH  
ACOUSTIC RW - A4  
INSULATION R-VALUE - 1.77



**WALL TYPE B**  
SCALE 1:5  
EXTERNAL WALL WITH COMPOSITE TIMBER CLADDING  
ACOUSTIC RW - A4  
INSULATION R-VALUE - 1.77



**WALL TYPE C**  
SCALE 1:5  
EXTERNAL DOUBLE BRICK WALL  
ACOUSTIC RW - A4  
INSULATION R-VALUE - 1.77

**NOTES:**

- ALL MATERIALS ARE TO BE APPROVED BY THE ARCHITECT PRIOR TO ORDERING
- ANY SUBSTITUTIONS ARE TO BE APPROVED BY THE ARCHITECT
- CONTRACTOR IS TO CONFIRM ALL LEAD TIMES PRIOR TO ORDERING
- AGREED CONTROL SAMPLES ARE TO BE IN THE SITE OFFICE
- ALL MATERIALS ARE TO BE APPLIED OR INSTALLED IN ACCORDANCE WITH APPROPRIATE AUSTRALIAN STANDARDS
- ALL MATERIALS ARE TO BE INSTALLED TO THE MANUFACTURER'S REQUIREMENTS
- THE CONTRACTOR SHALL PROVIDE MAINTENANCE MANUALS UPON PRACTICAL COMPLETION
- THE CONTRACTOR SHALL HOLD AND PASS ON DOCUMENTED EVIDENCE OF ALL WARRANTIES TO THE ESTABLISHED BODY CORPORATE OR THE SITE OWNER ON PRACTICAL COMPLETION

**ACOUSTIC NOTES:**

**ALL WINDOWS & SLIDING DOORS IN BOARDING ROOMS 2, 10, 30, 44 & 58** ARE TO BE DOUBLE GLAZED SYSTEM THAT IS 8mm LAMINATED WITH 50mm AIR GAP THEN 6mm LAMINATED WITH FULL PERIMETER SCHUEGL DULON ACOUSTIC SEALS (1) OR A 6mm LAMINATED SECONDARY WINDOW /SLIDER FOLLOWED BY A MIN 6mm WINDOW AT A 50MM GAP OR ANY OTHER WINDOW SYSTEM THAT ACHIEVES AN RW OF 39-41.

**WINDOWS & SLIDING DOORS IN BOARDING ROOMS 10, 28, 43 & 55** ARE TO BE 10mm LAMINATED TYPE WITH FULL PERIMETER SCHUEGL DULON ACOUSTIC SEALS (1) AND ACHIEVE AN RW RATING OF 30-32.

**WINDOWS & SLIDING DOORS IN COMMUNAL ROOM & ALL OTHER BOARDING ROOMS** ARE TO BE 6mm LAMINATED TYPE WITH FULL PERIMETER SCHUEGL DULON ACOUSTIC SEALS (1) AND ACHIEVE AN RW RATING OF 30-32.

**WINDOWS & SLIDERS IN OTHER AREAS OF BOARDING HOUSE (BATHROOMS/LAUNDRIES, STAIRWELLS, HALLWAYS ETC)** ARE UNRESTRICTED AND TO BE IN ACCORDANCE WITH AS2047 (WINDOWS IN BUILDINGS). (1)

**EXTERNAL DOORS** ARE TO BE SOLID CORE WITH ACOUSTIC SEALS FITTED AROUND THE DOOR A DROP SEAL IS REQUIRED AT THE BASE OF THE EXTERNAL DOOR WITH A RW RATING OF 30-33 TO BE ACHIEVED.

**EXTERNAL WALLS** ARE TO BE DOUBLE SKIN CAVITY BRICK WALLS MINIMUM 270 /250mm DOUBLE BRICK / BRICK VENEER CONSTRUCTION OR ANY OTHER METHOD OF WALL CONSTRUCTION WITH AN RW OF 44

**ROOF** IS TO BE MINIMUM 150mm CONCRETE AND /OR GALVANIZED STEEL TROUGH ROOFING (0.5mm) ON 10mm PLASTERBOARD CEILING & 75mm, 1.1kg/m<sup>3</sup> MINERAL WOOL BATTIS BETWEEN CEILING JOISTS (2) WITH A RW RATING OF 40-44 TO BE ACHIEVED.

(1) NO VEEF HOLES IN WINDOWS /SLIDERS, ALL GAPS BETWEEN WINDOW & DOOR FRAMES AND THE MASONRY WALLS ARE TO BE SEALED USING ACOUSTIC FOAM HLT (50%) OR SIMILAR GLASS WOOL BATTIS CAN BE APPLIED PRIOR TO THE APPLICATION OF THE FOAM TO SEAL LARGER GAPS.  
(2) ALL GAPS ARE TO BE ACOUSTICALLY SEALED.

IN GENERAL, ALL NEW EXTERNAL AIR-CONDITIONING UNITS ARE TO BE ACOUSTICALLY ENCLOSED OR SET AWAY BY MORE THAN 3.0M FROM ANY BOUNDARY.

**CAR PARK SUPPLY AIR** (IF APPLICABLE) INSTALL A SILENCER MIN 20 (E29 /90) (3) OR EQUIVALENT

**CAR PARK EXHAUST FAN** (IF APPLICABLE) PROVIDE SILENCER BEFORE AND AFTER FAN, SILENCER MIN 20 (E29 /90) (3) OR EQUIVALENT LARGED DUCT WITH MIN 28mm 32kg/m<sup>3</sup> ACOUSTIC INSULATION A MINIMUM 10 METRES INTO THE CAR PARK.

ALL SILENCERS SHOULD BE PLACED 1 TO 2 DUCT DIAMETER DISTANCE AWAY FROM THE FANS.

**SOUND BARRIER FENCE** 1.8 METRE GAP FREE FENCE IS INSTALLED ON THE GROUND FLOOR BOUNDARIES ADJACENT TO THE NEAREST LOT CORNERS AT 19 & 20-29 MARLBOROUGH ROAD AND THE REAR OF THE SITE ADJACENT TO MD 30-32 COURALLIE AVE. HOMEBUILD WEST. THE FENCE CAN BE OF LAPPED & GAPPED TIMBER, COLOURBOND STEEL OR MASONRY CONSTRUCTION.

**SUPERVISION** MANAGEMENT IS TO ENSURE THAT LOCKERS ARE SUPERVISED AT ALL TIMES AND HOUSE RULES ARE FOLLOWED TO MINIMIZE NOISE GENERATED BY RESIDENTS OF THE BOARDING HOUSE IN ACCORDANCE WITH A PLAN OF MANAGEMENT. NO LARGE SOCIAL GATHERINGS ARE TO OCCUR AND NO MUSIC IS TO BE PLAYED IN OUTDOOR COMMON AREAS. IT IS RECOMMENDED THAT WHEN TV OR MUSIC IS PLAYED IN BOARDING ROOMS OR COMMUNAL ROOM MANAGEMENT IS TO ENCOURAGE LOCKERS TO HAVE THEIR WINDOWS AND DOORS CLOSED.

**SIGNS** SIGNS REMINDING RESIDENTS OF THE NEARBY RESIDENTIAL ZONE ARE TO MINIMIZE NOISE AT ALL TIMES SHALL BE INSTALLED AT ENTRY AND HALLWAYS OF THE BOARDING HOUSE, THE COMMUNAL ROOM AND COMMUNAL TERRACE, TO ENSURE THAT ALL MUSIC AND SOUNDS ARE RESTRICTED WITHIN THE PROPERTY AND NOT TRANSMITTED INTO ADJOINING RESIDENCES.

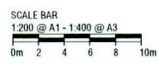
**NOISE MANAGEMENT PLAN** - INSTALL A CONTACT NUMBER AT THE FRONT OF THE BOARDING HOUSE SO THAT COMPLAINTS REGARDING THE STATION OPERATION CAN BE MADE. IMPLEMENT A COMPLAINT HANDLING PROCEDURE. IF A NOISE COMPLAINT IS RECEIVED THE COMPLAINT SHOULD BE RECORDED ON A COMPLAINT FORM, CONTAINING THE FOLLOWING:

- NAME AND ADDRESS OF THE COMPLAINANT
- TIME AND DATE THE COMPLAINT WAS RECEIVED
- THE NATURE OF THE COMPLAINT AND THE TIME /DATE THE NOISE WAS HEARD
- THE NAME OF THE EMPLOYEE THAT RECEIVED THE COMPLAINT
- ACTIONS TAKEN TO INVESTIGATE THE COMPLAINT AND THE SUMMARY OF THE RESULTS OF THE INVESTIGATION
- INDICATION OF WHAT WAS OCCURRING AT THE TIME THE NOISE WAS HAPPENING (IF APPLICABLE)
- REQUIRED REMEDIAL ACTION (IF APPLICABLE)
- VALIDATION OF THE REMEDIAL ACTION
- SUMMARY OF FEEDBACK TO THE COMPLAINT

ALSO A PERMANENT REGISTER OF COMPLAINTS SHOULD BE HELD ON THE PREMISES WHICH SHALL BE REVIEWED MONTHLY BY STAFF TO ENSURE ALL COMPLAINTS ARE BEING RESPONDED TO. ALL COMPLAINTS RECEIVED SHALL BE REPORTED TO MANAGEMENT WITH INITIAL ACTION/INVESTIGATION COMMENCING WITHIN 7 DAYS. THE COMPLAINT SHOULD ALSO BE NOTIFIED OF THE RESULTS AND ACTIONS ARISING FROM THE INVESTIGATION.

**NOTES:**  
READ DRAWINGS IN CONJUNCTION WITH SPECIFICATION - SEE A7000 SERIES FOR FINISHES AND SCHEDULES  
DOCUMENTATION FOR TENDER NOT FOR CONSTRUCTION - ALL MEASUREMENTS ARE TO BE VARIFIED ON SITE

**DEVELOPMENT APPLICATION**



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Contractor	Client	Project	Title	Drawn By	Checked By	Project No.
		PROPOSED BOARDING HOUSE 51 JAMISON RD KINGSWOOD	FINISHES NOTES AND DETAILS	DM	CB	3329
				Date	Issue	Sheet No.
				JAN 2017	TENDER	A9100
				Scale	Revision	
				As indicated	B	