GEOTECHNICAL INVESTIGATION REPORT

PROPOSED SENIORS LIVING DEVELOPMENT

671 - 683 OLD SOUTH HEAD ROAD, VAUCLUSE NSW

PREPARED FOR

OSHR AT VAUCLUSE HOLDINGS PTY LTD

REPORT ID: G21071VAU-R01F

Date: 8th October 2021

Revision No.: 0

Client:

OSHR At Vaucluse Holdings Pty Ltd

C/- Blare Management

Level 1, 19-23 Hollywood Avenue,

Bondi Junction NSW 2022

Attention: Henri Hines

Email: henri@blare.com.au

Author: S. McCormack (B.E – Civil) MIEAust, CPEng, CEnvP, NER (geotechnical, civil, environmental)

Field Engineer / Scientist: S. McCormack

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1 PROJECT INFORMATION

1.1 INTRODUCTION AND OBJECTIVE

Geo-Environmental Engineering Pty Ltd (GEE) was commissioned by Blare Management, on behalf of OSHR At Vaucluse Holdings Pty Ltd, to complete a geotechnical investigation at 671 - 683 Old South Head Road, Vaucluse New South Wales (herein referred to as the 'site') which relates to the proposed construction of a multi-storey seniors living development with a two-level basement. An in-ground swimming pool is also proposed at the rear of the site.

A survey plan showing existing site features in provided in **Appendix A**. The site covers an approximate area of 3,908.08m^2 (by calculation) and encompasses the following legal allotments:

- Lot B in Deposited Plan (DP) 324744
- Lot 2 in DP 10314
- Lot 1 in DP 169310
- Lot 4 in DP 192614
- Lot 1 in DP 168877
- Lot 1 in DP 167942
- Lot 1 in DP 666626
- Lot 2 in DP 316716

The investigation was required to support a Development Application with Waverley Council and to assist with the preliminary design of the development. The investigation also compliments a previous geotechnical investigation and report completed by Crozier Geotechnical Consultants in 2018 (reference 2) for part of the site (i.e. 671 – 679 Old South Head Road).

The report presents the factual results of the field investigations and provides interpretation and recommendations regarding the ground conditions at the site in accordance with client requirements and the agreed scope of work.

1.2 PROPOSED DEVELOPMENT

The proposed development comprises the demolition of an existing low-density residential properties and the construction of a multi-storey seniors living development with a two level basement for parking and general storage.

According to the architectural plans, a copy of which is provided in **Appendix A**, the lowest basement level will have Finished Floor Level of 61.5m above Australian Height Datum (AHD) and vehicle access will be possible from Old South Head Road via a ramp at the northern end of the development. The access ramp to the basement will extend up to the northern boundary while the remainder of the basement levels will be setback at least 2.2m from the boundaries. Considering the existing surface levels as shown on the survey plan, and the necessary over excavation to accommodate the basement floor slab, GEE anticipates an excavation depth of between approximately 5.0m and 12.0m. The deepest excavation will occur at the southern end of the site.

The depth of the proposed pool is not known although GEE expects it to require excavation to a depth of between 1.0m and 2.0m with this excavation setback approximately 2.0m from the boundaries.

1.3 PREVIOUS INVESTIGATION

As previously mentioned, Crozier Geotechnical Consultant completed a geotechnical investigation across part of the site (i.e. 671 – 679 Old South Head Road) in 2018 (reference 1) which included:

- ◊ The drilling of five auger boreholes along with the performance of Dynamic Penetrometer (DCP) testing to investigate the subsurface geology, depth to bedrock and identification of ground water conditions, and
- ◊ Detailed geotechnical mapping of the site and adjacent properties including photographic record of site conditions by an experienced Geotechnical Engineer.

A copy of the borehole logs and DCP test data is provided in **Appendix B**. A site plan showing the location of their boreholes and DCP tests is provided as **Figure 1**.

1.4 SCOPE OF WORK

The scope of work undertaken by GEE, to satisfy the above objective, was as follows:

- ◊ Visual appraisal of the site conditions and locality,

- ◊ Review of a previous geotechnical report completed for the adjoining residential development at 671 – 679 Old South Head Road (reference 1),
- ◊ Review of geological, soils and acid sulfate soil maps relevant for the site,
- ◊ The drilling and logging of two additional boreholes (BH201 and BH202) to compliment the previous boreholes drilled by Crozier Geotechnical Consultants in 2018,
- ◊ The performance of Standard Penetration Tests and a Dynamic Cone Penetrometer (DCP) test to assess the consistency and/or relative density of the soil profile,
- ◊ The collection of representative soil samples for the preliminary assessment of soil salinity and aggressivity, and
- ◊ Engineering assessment and reporting.

2 SITE INFORMATION

2.1 SITE DESCRIPTION

The site is an irregular parcel of land situated on the eastern corner of Old South Head Road.

At the time of this investigation the site comprised seven residential properties, each containing a house with associated gardens/access pathways, sheds/outbuildings, paved areas and scattered trees. Photographs of the frontages of each property are provided below as **Plates 1** to **7**.

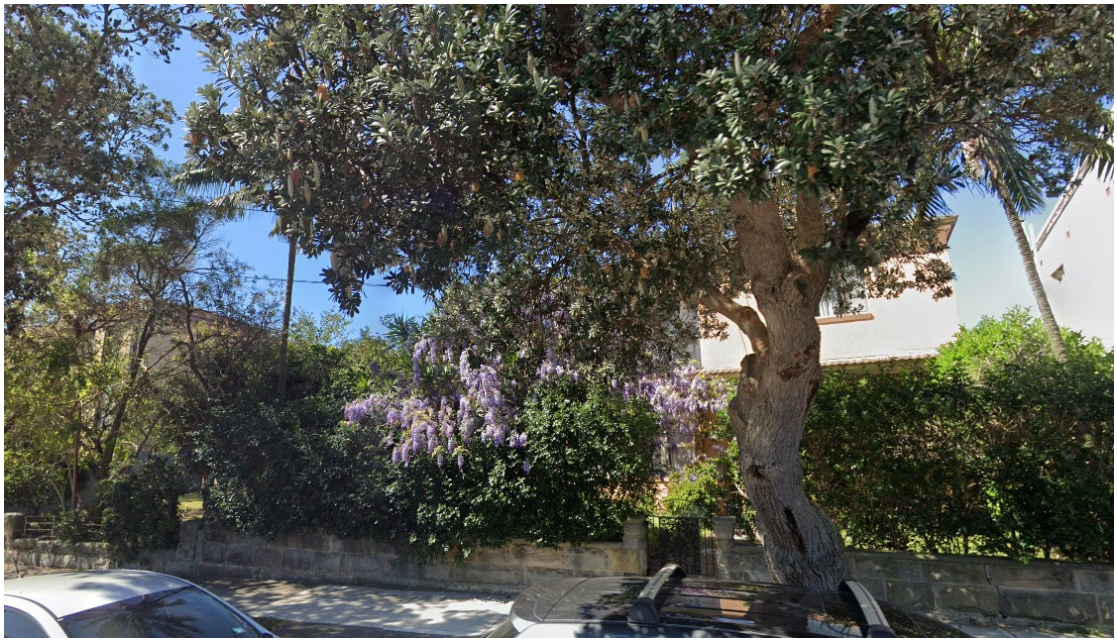


Plate 1: Front of No. 671 Old South Head Road (Source: Google Street View)

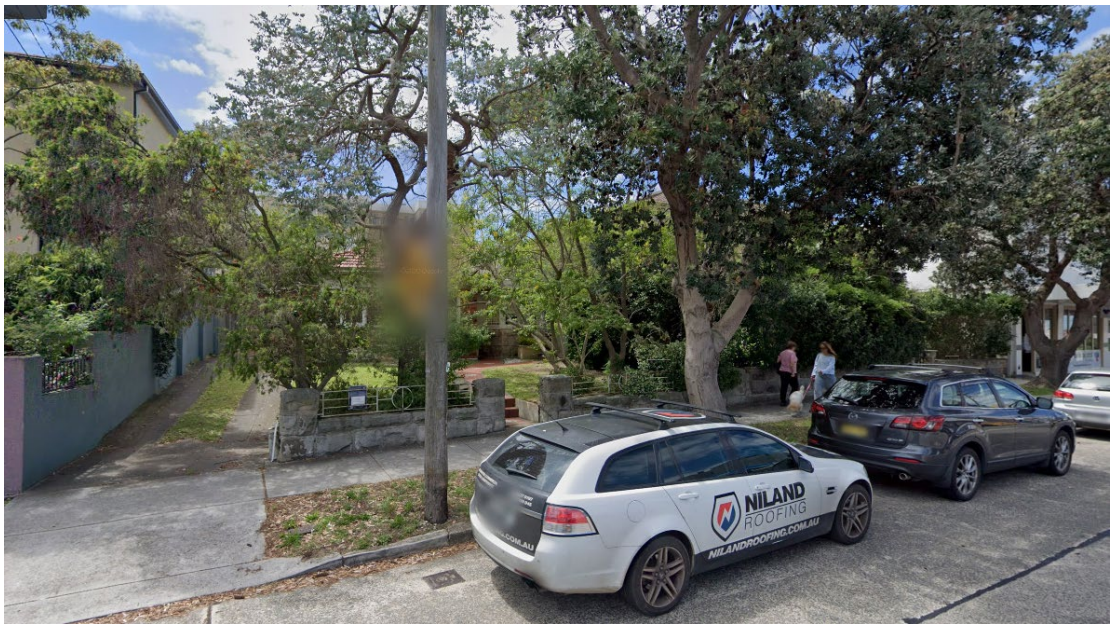


Plate 2: Front of No. 673 Old South Head Road (Source: Google Street View)

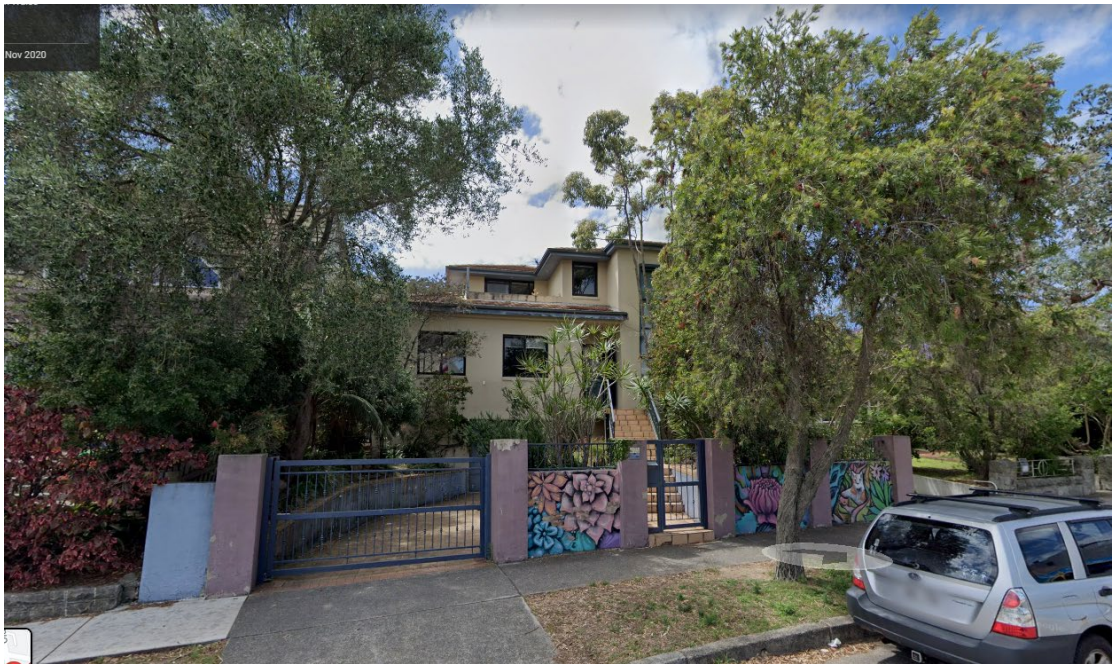


Plate 3: Front of No. 675 Old South Head Road (Source: Google Street View)

Plate 4: Front of No. 677 Old South Head Road (Source: Google Street View)

Plate 5: Front of No. 679 Old South Head Road (Source: Google Street View)

Plate 6: Front of No. 681 Old South Head Road (Source: Google Street View)

Plate 7: Front of No. 683 Old South Head Road (Source: Google Street View)

2.2 TOPOGRAPHY

The site is located about mid-way on a gentle to moderately north dipping slope. The surface elevation as shown on the survey plans (**Appendix A**) vary between approximately 73m AHD at the southern boundary and 66m AHD at the northern boundary.

2.3 GEOLOGY AND SOILS

2.3.1 *Regional*

A review of the regional geological map (reference 2) indicates that the site is underlain by the Hawkesbury Sandstone formation, which typically consists of "*…medium to coarse-grained quartz sandstone, very minor shale and laminite lenses*". The map also indicates that the site is within close proximity (~200m) to the Quaternary aged Alluvium formation which comprises"*…medium to fine-grained 'marine' sand with podsols".*

A review of the regional soils map indicates that the site is located within the Lambert Soil Landscape Group (reference 3) which is associated with undulating to rolling rises and low hills on Hawkesbury Sandstone. Local reliefs are up typically 20-120m and slopes are usually less than <20% in gradient, with frequent rock outcrops (>50%). Soils of the Lambert Group typically comprise erosional sands and clays, have seasonally perched water tables and very low soil fertility.

2.3.2 *Site Specific*

A broad summary of the subsurface conditions observed in the previous investigation by Crozier Geotechnical Consultants (reference 1) is provided below:

- *"**TOPSOIL/FILL** – this layer was encountered at all test locations to a maximum depth of 0.95m (BH4) and comprised fine to medium grained sand.*
- ***SAND (Superficial Soils)** – this deposit was encountered at all test locations to the maximum depth of investigation of 5.80m (BH5) with the exception of BH1 where the base of the deposit was encountered at a depth of 2.60m. The deposit comprised fine to medium grained, poorly graded sand which varied in density between very loose to very dense and is considered to represent Quaternary 'dune' sand. Podsol horizons (bleached sand over cemented sand) were encountered within this soil at several locations/levels.*
- ***Gravelly SAND (Superficial Soils)** – This layer was only encountered within BH1 between 2.60 and 2.80m depth. The deposit comprised medium dense, fine to*

medium grained sand with sub-rounded gravel and is a characteristic deposit found at the base of the Quaternary sands.

- ***Sandy CLAY (Residual soils)*** *– Firm clay which rapidly became very stiff to hard was only encountered within BH1 underlying the gravelly sand and represents a residual soil derived from the weathering of the underlying Hawkesbury Sandstone.*
- ***SANDSTONE (Bedrock)*** *– What has been interpreted extremely low strength sandstone bedrock was only encountered in BH1 below approximately 3.60m however the distinction between residual soils and bedrock should be considered approximate and gradational."*

2.4 HYDROGEOLOGY

2.4.1 *Regional*

The regional and permanent groundwater in the vicinity of the site, is expected to be confined or partly confined, discrete, water-bearing zones within the bedrock formation, or partly confined, perched water tables within the sand profile. Intermittent water flow or seepages are likely to occur through defects in the exposed sandstone outcrop, on the sand-residual soil interfaces or residual soil-rock interfaces, especially during periods of heavy rainfall.

2.4.2 *Site Specific*

Permanent groundwater (i.e. the water table) was not identified in the previous boreholes drilled by Crozier Geotechnical Consultants.

2.5 ACID SULFATE SOIL RISK

Acid sulfate soils are naturally occurring sediments and soils containing iron sulfides (principally iron sulfide, iron disulfide or their precursors). Oxidation of these soils through exposure to the atmosphere or through lowering of groundwater levels results in the generation of sulfuric acid.

Land that may contain potential acid sulfate soils was mapped by the NSW Department of Land and Water Conservation (DLWC) and based on these maps local Councils produced their own acid sulfate soil maps to be used for planning purposes.

The DLWC '*Sydney Heads'* Acid Sulfate Soil Risk Map (reference 4), indicates that the site lies within an area with no known occurrences of acid sulphate soil and land activities within this area are "...*not likely to be affected by acid sulphate soil materials*".

The Acid Sulfate Soils Map produced by the NSW Department of Planning and Environment, via interactive online mapping, indicates that the site lies outside of areas defined as '*Class 1*' to '*Class 5*'. In this regard, there is no need for an acid sulphate soil assessment or management plan.

3 METHOD OF INVESTIGATION

Fieldwork was completed in by Stephen McCormack from GEE on the 19th August 2021 and comprised the following activities:

- ◊ The drilling and logging of two boreholes (BH201 and BH202) to better assess the subsurface conditions across the site,
- ◊ The performance of SPT and DCP tests at the borehole locations to assess the consistency and/or relative density of the soil profile, and
- ◊ The collection of representative soil samples for the preliminary assessment of soil salinity and aggressivity.

3.1 BOREHOLE DRILLING AND SPT/DCP TESTING

Prior to commencement of the bores, an inspection for potential underground services and utilities was completed and cross-checked with the results of a Dial Before you Dig (DBYD) search.

Borehole BH201 was drilled at the front of No. 683 Old South Head Road, which is also the north-western corner of the site, using a truck mounted drilling rig that was owned and operated by the FICO Group, utilising solid flight augers (SFA). SPTs were performed in borehole BH201 in accordance with Australian Standard (AS) 1289.6.3.1 (reference 5).

Borehole BH202 was drilled at the rear of No. 683 (north-eastern corner of the site) using an 85mm diameter, hand operated, auger, while the DCP tests were performed in accordance with Australian Standard test method AS1289.6.3.2-1997 (reference 6).

During the drilling of each borehole the encountered fill and natural soils were geologically logged taking care to describe the presence and depth of fill material / previously disturbed ground, the natural stratum, moisture, seepages or water bearing zones. At the completion of each borehole, they were backfilled with soil cuttings and the surface reinstated. Both boreholes were advanced through a surface layer of topsoil and the underlying natural sand soil profile before terminating within the underlying sandstone bedrock formation at a depth of 2.2m bgs at BH201 and 3.95m bgs at BH202.

The location of the boreholes and DCP tests was estimated using measurements from existing features and is shown on **Figure 1**. A copy of the borehole log (including SPT and DCP test data) is provided in **Appendix B**.

3.2 SOIL SAMPLING

Soil samples were collected at regular intervals from each of the boreholes and selected samples were submitted to Eurofins laboratory for the following NATA accredited testing as part of a preliminary assessment of soil salinity and soil aggressivity towards buried concrete and/or unprotected steel.

4 INVESTIGATION RESULTS

4.1 SUBSURFACE CONDITIONS

The site stratigraphy, as observed in the previous boreholes and the recent boreholes drilled by GEE typically comprised a layer of topsoil and/or fill material overlying natural sand which was underlain by sandstone bedrock which is consistent with the Hawkesbury Sandstone formation.

Detailed descriptions of the subsurface conditions on site are provided in the borehole logs provided in **Appendix B**, while the generalised soil profile is provided in **Table 1**. Two geological sections (A-A' and B-B') are also provided in **Figure 2**.

Table 1: Summary of Subsurface Conditions – Geological Model

Layer / Unit	Description	Depth to the Top of Layer (m)	Consistency / Relative Density[(1)]
1 - TOPSOIL / FILL	SAND: dark brown and grey, fine to medium grained with trace roots and silt.	0.0	Very loose to loose
2a - NATURAL SOIL	SAND: grey, brown, orange-brown, fine to medium grained with a band of partially indurated nodules.	0.2 – 0.95	Loose
2b - NATURAL SOIL		1.0 – 2.3	Medium Dense (or better)
3 - BEDROCK	SANDSTONE: grey and orange, weathered.	2.0 to >5.8m	--

4.1.1 *Groundwater*

Permanent groundwater (i.e. the water table) was not encountered during the drilling of the boreholes and is expected to be present within the bedrock formation. However, perched seepage water was observed near the interface of the residual soil and bedrock formations. This water is directly recharged by rainfall events and therefore its presence and volume will vary significantly.

4.2 LABORATORY TEST RESULTS

Representative samples of soil were collected from each borehole and submitted to Eurofins MGT laboratory for selective testing which included:

- ◊ Electrical Conductivity (EC) to provide a detailed assessment of the salinity potential of the soil profile, and
- ◊ Sulphate, Chloride, resistivity and pH to determine the exposure classification of the soil with respect to buried structural concrete and unprotected steel.

The laboratory test results are presented in **Appendix C**, while a summary of the results is provided in the following sub-sections.

4.2.1 *Soil Salinity Testing*

An assessment of soil salinity conditions has been undertaken with reference to guidance published by the Department Land and Water Conservation NSW (reference 7). In this regard, selected samples of natural soil were submitted to Envirolab for NATA accredited testing of Electrical Conductivity (EC), which is the primary indicator of salinity,

The raw EC results and the EC_e results[1], are provided in **Table 2**.

Table 2: Electrical Conductivity Results

Sample Location / Depth	**Sample Description**	**EC** (dS/m)	**Multiplication Factor[1]**	**EC_e** (dS/m)
BH201/1.0 – 1.45m	SAND	0.018	17	0.31
BH201/1.6 – 1.8m	SAND	0.016	17	0.27
BH202/1.2 – 1.5m	SAND	0.016	17	0.27
BH202/2.3 – 2.5m	SAND	0.022	17	0.37
BH202/3.3 – 3.5m	SAND	0.010	17	0.17

According to the Department Land and Water Conservation NSW (reference 9) the soil salinity classes are as follows:

[1] EC_e results are EC data multiplied by a conversion factor which depends upon the soil texture / type (Reference 6)

ECe (dS/m)	Class
<2	Non Saline
2 – 4	Slightly Saline
4 – 8	Moderately Saline
8 – 16	Very Saline
>16	Highly Saline

The above test data indicate that the fill/natural soil profile is non-saline.

4.2.2 *Aggressivity Testing*

A limited number of soil samples were analysed for pH, sulfate, chloride and resistivity to provide a preliminary assessment of the exposure classification (or aggressiveness/corrosiveness potential) of the soil with respect to future buried steel and/or concrete (e.g. footings).

To determine the aggressiveness of the soil and water environment on concrete or steel, the chemical test results are compared to Table 6.4.2(C) and Table 6.5.2(C) from Section 6 of the Australian Standard AS 2159 (reference 8). This section provides assessment criteria to assess the 'exposure classification' for a concrete or steel pile. The Standard has two classes of soil conditions:

(A) high permeability soils below groundwater; and
(B) low permeability soils and all soils above groundwater.

For this site, the soil samples are considered to be condition 'B' and based on the chemical testing results, the standard provides a range of 'exposure classifications' from non-aggressive to very severe. For the range of chemical conditions in the soil surrounding the structure, the condition leading to the most severe aggressive conditions is adopted.

A summary of the soil results is provided in **Table 3**.

Table 3: Exposure classification (aggressivity) test results

Location / Depth (m bgs)	**Soil Condition**	**pH**	**Sulphate** (SO_4) mg/kg	**Chloride** (Cl) mg/kg	**Resistivity** Ohm.cm
BH201/1.0 – 1.45m	B	7.0	<10	<10	54.000
BH201/1.6 – 1.8m	B	6.9	<10	<10	62.000
BH202/1.2 – 1.5m	B	6.3	<10	<10	62.000
BH202/2.3 – 2.5m	B	6.2	13	10	45.000
BH202/3.3 – 3.5m	B	6.6	<10	<10	97.000

The aggressivity potential of an environment on concrete is dependent on the sulphate and pH levels of the soil. Based on the limited number of test results above and taking into account the 'worst-case' sample, the subsurface profile is non-aggressive towards concrete. According to Australian Standard AS 3600-2009 (reference 9), specifically Table 4.8.1, this equates to an exposure classification of 'A1'.

The corrosive potential of an environment on unprotected steel is normally dependent on pH, chloride, and resistivity levels of the soil. Based on the limited number of test results above and taking into account the 'worst-case' sample, the subsurface profile is considered to be non-aggressive towards any unprotected steel.

5 DISCUSSION

5.1 SITE PREPARATION

Following demolition of the existing structures and prior to bulk excavation works, all topsoil with organic matter and any pavement materials, should be removed from the proposed building and pavement areas. Stripped topsoil should be stockpiled for re-use as landscape material or disposed off-site.

Material removed from site will need to be managed in accordance with the provisions of current legislation and may include segregation by material type classification in accordance with NSW EPA (2014) Waste Classification Guidelines (reference 10) and disposal at facilities appropriately licensed to receive the particular materials. GEE notes that the natural soil and bedrock may be classified as Virgin Excavated Natural Material (VENM) and re-used on other sites rather than disposed at a landfill, although it must be proven to be free of contamination.

Also, considering the proximity of adjoining buildings, care must be taken during demolition works to ensure that the adjoining footings, or the zone of influence of these footings, are not disturbed.

5.2 EARTHWORKS

Earthworks at the site is expected to require comprise excavation to a depth of between approximately 5.0m and 12.0m to construct the proposed basement. The access ramp to the basement will extend up to the northern boundary while the remainder of the basement levels will be setback at least 2.2m from the boundaries.

Elsewhere, excavation to a depth of between 1.0m and 2.0m will be required for the proposed pool at the rear of the site with this excavation setback approximately 2.0m from the boundaries.

5.2.1 *Expected Excavation Conditions*

Based on our geological sections A-A' and B'B' (**Figure 2**), the proposed basement excavation will encounter predominately sandy soil and then sandstone bedrock. The pool excavation is expected to be wholly within the sandy soil profile, although this should be confirmed prior to installation.

GEE notes that the strength of the bedrock has not been assessed as part of this geotechnical investigation, however, based on local knowledge, it is likely to be initially

very low to low strength becoming medium to high strength soon thereafter. To confirm the strength of the bedrock within the depth of proposed excavation, a more detailed investigation would be required (preferably following demolition of the existing dwelling) and would need to include the coring and strength testing of the bedrock formation.
The excavation of the soil profile is expected to be readily excavated using standard equipment such as excavators. However, the use of an impact hammer is likely to be required upon encountering the bedrock formation, especially when combined with unfavourable rock-defect geometry. When using an impact hammer the effects of vibration should be considered and are discussed further in Section 5.2.4.

5.2.2 *Groundwater Inflow / Seepage Water*

Permanent groundwater was not encountered during the drilling of the boreholes and will not be encountered by the proposed earthworks. However, water seepages are likely to occur on the contact between soil and bedrock and from defects within the underlying sandstone formation. Such seepages are directly recharged by rainfall and therefore will be intermittent and vary significantly.

The flow of seepage water is expected to be sufficiently managed during the earthworks phase by pumping from a sump at the base of the excavation. In the long term, GEE recommends that the subsurface walls be watertight and conventional techniques such as strip drains, and ag lines will need to be incorporated into the design of these walls to ensure that the flow is not impeded.

5.2.3 *Excavation Support*

Temporary batters are not recommended the for proposed basement and pool excavations. Rather, temporary and permanent support (as part of the final basement structure) will be required to prevent damage to the adjoining structures.

Given the ground conditions encountered, suitable retention systems would be including a contiguous pile wall (where the gaps between piles progressively filled with grout / concrete) or secant pile walls. Although the choice of support should be discussed with an experienced contractor and will primarily depend on cost, although other factors such as the aesthetics of the final wall, the potential impact of seepage water at the soil/bedrock interface and whether it can function as a structural support for foundations.

For a piled wall option, concrete or grout injected continuous flight auger (CFA) piles are recommended as the sand profile can collapse, particularly where seepage water is encountered. Sheet piling or driven steel piles is not normally recommended because of

the potential to adversely affect nearby structures due to the ground vibration generated during installation.

The design of the earth retaining structure should be designed by a suitably experienced structural engineer in accordance with AS4678-2002 Earth Retaining Structures (reference 11) with consideration of both the short- and long-term configurations. In the short term, should the shoring walls be cantilevered or supported by a single row of anchors and some movement behind the walls can be tolerated, earth pressures acting on the shoring walls can be calculated using a triangular earth pressure distribution calculated using an 'active' earth pressure coefficient.

When internal props, such as the ground floor slab, restrain retaining wall movement, or where significant movements cannot be tolerated (rigid wall) such as adjacent to adjoining structures, an 'at-rest' earth pressure coefficient (Ko) should be adopted with either a uniform or trapezoidal pressure distribution. It should be noted that shoring which is designed for this 'at rest' coefficient will still undergo some lateral movements, depending on the final configuration of the wall and construction sequence. Additionally, a factor of safety should be applied in considerations of the wall movement needed to fully mobilise passive pressure. Passive restraint in the soil profile below the basement level can be designed based on a passive earth pressure coefficient (Kp).

The design of any retaining structures should make allowance for all applicable surcharge loadings including construction activities around the perimeter of the excavation and adjacent buildings. Consideration should be given to the possibility of a hydrostatic pressure due to build-up of water behind the wall (e.g. from broken services), unless permanent subsurface drainage can be provided.

Finally, computer aided analysis may be carried out to assess potential ground movements based on different wall designs and construction sequence, so as to control deflections to within tolerable limits. It is also considered prudent to carry out surveys before and after installation to measure the actual movement of the wall or soil.

Preliminary geotechnical parameters for retaining wall design are provided below in **Table 4**. However, the additional investigations are recommended to confirm the depth, strength and quality of the bedrock formation beneath the entire development.

Table 4: Preliminary Geotechnical Design Parameters – Retaining Walls / Shoring

Material		Unit 1 and 2a Soil	Unit 2b Soil	Unit 3 Sandstone
Bulk Unit Weight (kN/m^3)		18	19	22
Earth Pressure Coefficients	Active (Ka)	0.33	0.27	0.3
	At Rest (Ko)	0.5	0.43	0.5
	Passive (Kp)	3.0	3.2	3.5
Elastic Modulus (MPa)		5	20	100
Drained Cohesion c' (kPa)		0	0	40
Drained Friction Angle ϕ' (°)		30	35	32
Poisson's Ratio		0.35	0.35	0.3

Note 1: Unit weights are based on visual assessment only – order of accuracy approximately ±10%.
Note 2: The passive earth pressure coefficients for rock have been reduced to allow for potential defects in the rock mass.

5.2.4 *Construction / Excavation Induced Vibration*

Structures and utilities adjacent to the excavation area are potentially sensitive to vibrations above certain threshold levels (regarding potential for cracking). When using a hydraulic hammer, vibrations will be transmitted through the ground and potentially impact on adjoining structures. Where possible, the use of other techniques not involving impact (*e.g.* rock saws), should be adopted as they would reduce or possibly eliminate risks of damage due to vibrations.

Where vibration intensive works such as hydraulic hammering of competent rock is proposed, contractors should assess the potential impact of their works based on the borehole logs and local knowledge of similar bedrock formations. Monitoring of construction induced vibration should be undertaken at the commencement of such activities at the nearest vibration receptor and in consultation with the project superintendent and geotechnical engineer so that excessive vibration effects are not generated.

Peak Particle Velocity (PPV) is usually the adopted measure of ground vibration, and the safe limits depend on the sensitivity of the adjoining structures. There are several Australian and overseas publications which provide vibration velocity guideline levels (or safe limits) including:

- Australian Standard AS2187.2-2006 Explosives - Storage and use - Use of explosives - Appendix J: Ground Vibrations and Airblast Overpressure (reference 12).
- Australian Standard AS2670.2-1990 Evaluation of human exposure to whole-body vibration - Part 2: Continuous and shock-induced vibration in buildings (1 to 80 Hz) (reference 13).
- DIN 4150 – Part 3 – 1999. Effects if Vibration on Structures (reference 14).
- Department of Environment and Conservation NSW, 2006. Assessing Vibration: a technical guideline (reference 15).
- British Standard BS 7385-1:1990. Evaluation and measurement for vibration in buildings. Guide for measurement of vibrations and evaluation of their effects on buildings (reference 16).
- British Standard BS 7385-2:1993. Evaluation and measurement for vibration in buildings. Guide to damage levels from groundborne vibration (reference 17).

Furthermore, the owners of adjoining assets/utilities sometimes have their own limits. In the absence of PPV guidelines from affected asset owners, GEE recommends that a 5mm/s limit be placed on vibrations for the adjoining residential structures.

If vibration levels are found to be unacceptable during the earthworks, it may be necessary to adopt vibration mitigation measures such as:

- The use of smaller excavation plant and hydraulic hammers,
- The use of a rock sawing or grinder adjacent to the site boundaries. GEE notes that this equipment also reduces the possibility of over-break and loosening of the rock mass.
- Hammering at 50% capacity in short bursts to prevent the build-up of resonant frequencies,
- The use of low vibration techniques such as rotary grinders or chemical rock splitting,
- Progressive breakage from open excavated faces,
- Selective breakage along open joints, where present, and
- Orientation of the rock hammer pick away from property boundaries and into the existing open excavation.

Finally, human discomfort levels caused by vibration are typically less than the levels that are likely to cause cosmetic or structural damage to structures. Therefore, complaints

may be lodged by neighbours before any cosmetic or structural damage occurs. In this regard, consideration may be given to adopting more stringent vibration limits recommended for human amenity or, as a minimum, ensuring that vibration monitoring is undertaken as reassurance to confirm that vibrations are within safe limits. Acceptable vibration limits for human comfort caused by construction and excavation equipment are provided in DEC (2006) (reference 15). Specifically, maximum acceleration limits as specified in Table 2.2 of the guideline should be adopted.

5.3 SALINITY RISK

The lab testing completed herein indicates that the soil profile is non-saline and therefore a site-specific salinity management plan is not warranted.

5.4 FOUNDATIONS

Following the required excavation work for the proposed basement levels, the subgrade is expected to comprise the sandstone bedrock formation. The shoring piles, if doubling as foundations, will also extend well into the sandstone formation.

The sandstone bedrock formation can provide a minimum allowable end bearing capacity of 800kPa (reference 18). However, additional investigation is recommended post demolition to confirm the depth, strength and quality of the bedrock beneath the entire development, which in turn will allow better design parameters for the foundations. As previously mentioned, grout or concrete injected Continuous Flight Auger (CFA) piles are recommended as the sandy soil has the potential to collapse. Particularly if seepage water is encountered at the soil and bedrock interface.

Finally, footing systems should be designed by a suitably qualified and experienced structural engineer, and GEE recommends that inspection by a geotechnical engineer is undertaken during the footing excavation stage, to confirm that the design founding conditions have been achieved.

5.4.1 *Aggressivity / Exposure Classification*

Based on the limited exposure classification test results (Section 4.2.2), and in accordance with AS 2159-2009 (reference 8), the subsurface concrete structures (*e.g.* footings) should be designed based on non-aggressive soil conditions for concrete. According to Australian Standard AS 3600-2009 (reference 9), the equivalent exposure classification is 'A1'. With respect to unprotected steel, the natural soil profile is considered to be non-aggressive / non-corrosive.

6 CONCLUSION AND RECOMMENDATIONS

GEE considers that sufficient information has been gained to be confident of the subsurface conditions across the site and to provide Council with assurances regarding the geotechnical feasibility of the proposed development.

Based on the results of the investigation, the proposed development is considered feasible, and GEE concludes that the bedrock formation beneath the site can withstand the proposed loads to be imposed, and standard shoring works (provided they are designed by a structural engineer), will ensure the stability of the excavation and provide protection and support of the adjoining properties, subject to engineering design and the recommendations of this report being properly implemented. Notwithstanding this additional investigation is recommended to confirm that the subsurface conditions encountered at the rear of the site are consistent with the front of the site. Preferably these investigations are completed post demolition of the existing structures to allow better access to the entire site.

GEE will be pleased to assist with any further advice or geotechnical services required in regard to the proposed development.

7 GENERAL LIMITATIONS

Soil and rock formations are variable. The logs or other information presented as part of this report indicate the approximate subsurface conditions only at the specific test locations. Boundaries between zones on the logs or stratigraphic sections are often not distinct, but rather are transitional and have been interpreted.

The precision with which subsurface conditions are indicated depends largely on the frequency and method of sampling, and on the uniformity of subsurface conditions. The spacing of test sites also usually reflects budget and schedule constraints. Groundwater conditions described in this report refer only to those observed at the place and under circumstances noted in the report. The conditions may vary seasonally or as a consequence of construction activities on the site or adjacent sites.

Where ground conditions encountered at the site differ significantly from those anticipated in the report, either due to natural variability of subsurface conditions or construction activities, it is a condition of this report that GEE be notified of any variations and be provided with an opportunity to review the recommendations of this report. Recognition of changed soil and rock conditions requires experience and it is recommended that a suitably experienced geotechnical engineer be engaged to visit the site with sufficient frequency to detect if conditions have changed significantly.

The comments given in this report are intended only for the guidance of the design engineer, or for other purposes specifically noted in the report. The number of boreholes or test excavations necessary to determine all relevant underground conditions which may affect construction costs, techniques and equipment choice, scheduling, and sequence of operations would normally be greater than has been carried out for design purposes. Contractors should therefore rely on their own additional investigations, as well as their own interpretations of the borehole data in this report, as to how subsurface conditions may affect their work.

8 REFERENCES

1. Crozier Geotechnical Consultants, 2018: *Report on Geotechnical Site Investigation for Proposed Residential Development at 671-679 Old South Head Road, Vaucluse*. Prepared for OSHR Holdings at Vaucluse Pty Ltd. Project No. 2018-106 Dated August 2018.
2. Department of Mineral Resources, 1983: Sydney 1:100,000 *Geological Series Map Sheet 9130 (Edition 1).*
3. Department of Environment, Climate Change and Water, 2009: *Sydney 1:100 000 Soil Landscape Series Sheet 9130 (fourth edition).*
4. DLWC, 1997: Department of Land and Water Conservation of NSW, 1997: *Sydney Heads Acid Sulfate Soil Risk Map – Edition Two.*
5. Australian Standards, 1997. *AS1289.6.3.1 Methods of testing soils for engineering purposes – Soil strength and consolidation tests – Determination of the penetration resistance of a soil – Standard Penetration Test (SPT).*
6. Australian Standards, 1997. *AS1289.6.3.2 Determination of the penetration resistance of a soil – 9kg dynamic cone penetrometer test*.
7. Department of Land and Water Conservation NSW, 2002: *Site investigations for urban salinity*.
8. Australian Standard (AS) 2159 -2009: Piling Design and Installation
9. Australian Standard (AS) 3600 – 2009: Concrete Structures.
10. New South Wales Environment Protection authority (NSW EPA), 2014: *Waste classification guidelines – Part 1 classifying waste.* November 2014.
11. Australian Standard AS4678-2002: Australian Standard, 2002: *Earth Retaining Structures*.
12. Australian Standard AS2187.2-2006 *Explosives - Storage and use - Use of explosives* - Appendix J: *Ground Vibrations and Airblast Overpressure.*
13. Australian Standard AS2670.2-1990: *Evaluation of human exposure to whole-body vibration - Part 2: Continuous and shock-induced vibration in buildings (1 to 80 Hz)*.
14. DIN 4150 – Part 3 – 1999. *Effects if Vibration on Structures.*
15. Department of Environment and Conservation NSW, 2006. *Assessing Vibration: a technical guideline.*

16. British Standard BS 7385-1:1990. *Evaluation and measurement for vibration in buildings. Guide for measurement of vibrations and evaluation of their effects on buildings.*

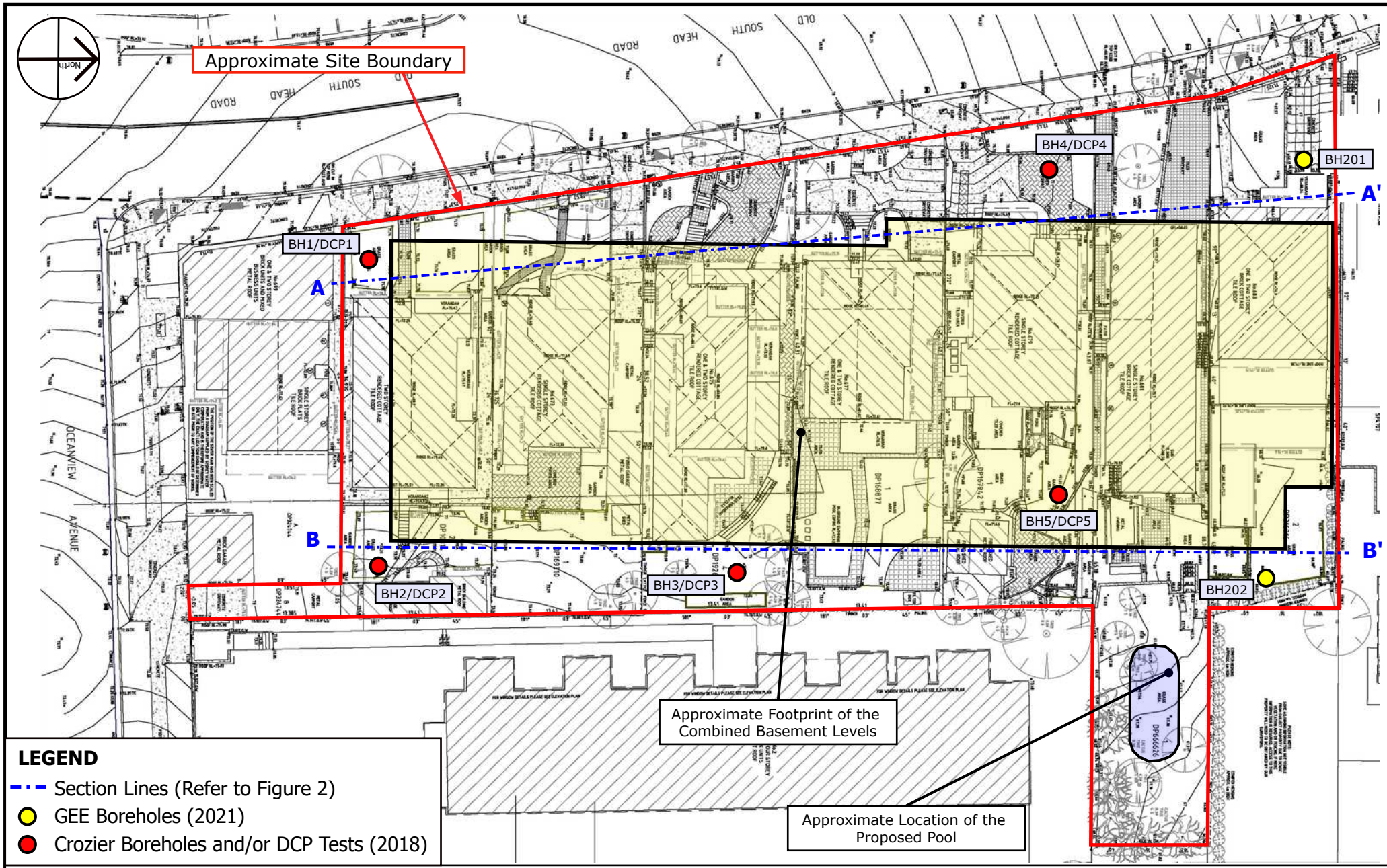
17. British Standard BS 7385-2:1993. *Evaluation and measurement for vibration in buildings. Guide to damage levels from groundborne vibration.*

18. Pells et al, 2019: *Classification of Sandstones and Shale in the Sydney Region: A Forty Year Review.* Australian Geomechanics Society, 2019.

FIGURES

1 – Site Plan

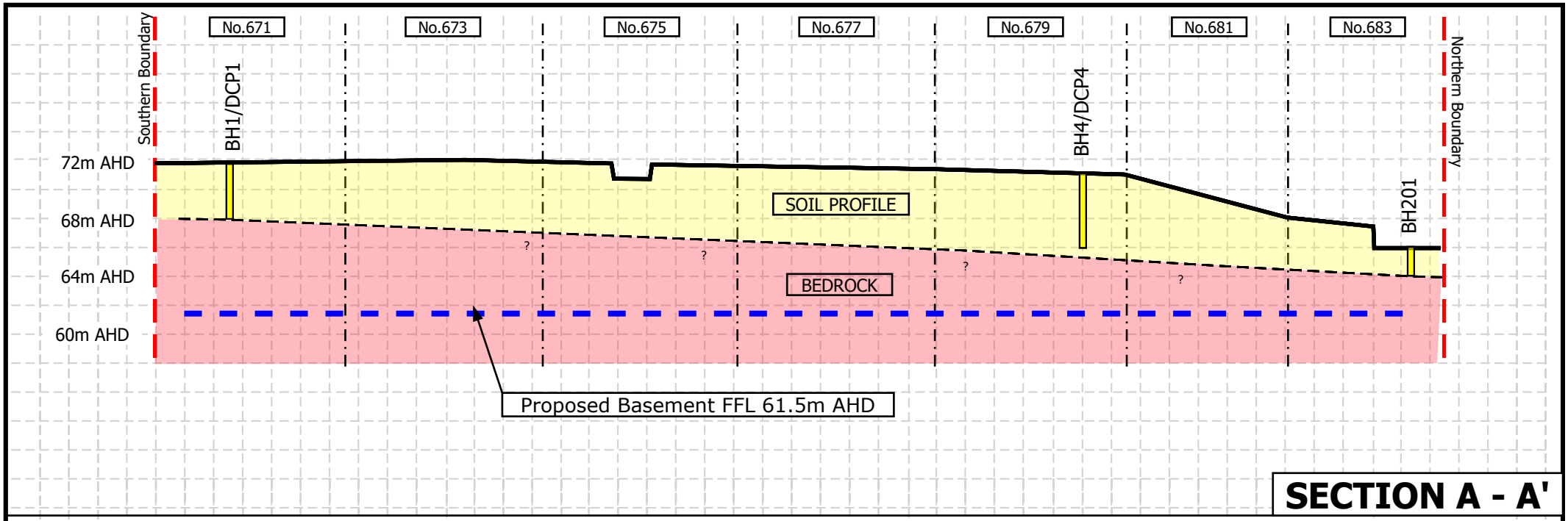
2 – Site Sections A-A' and B-B'



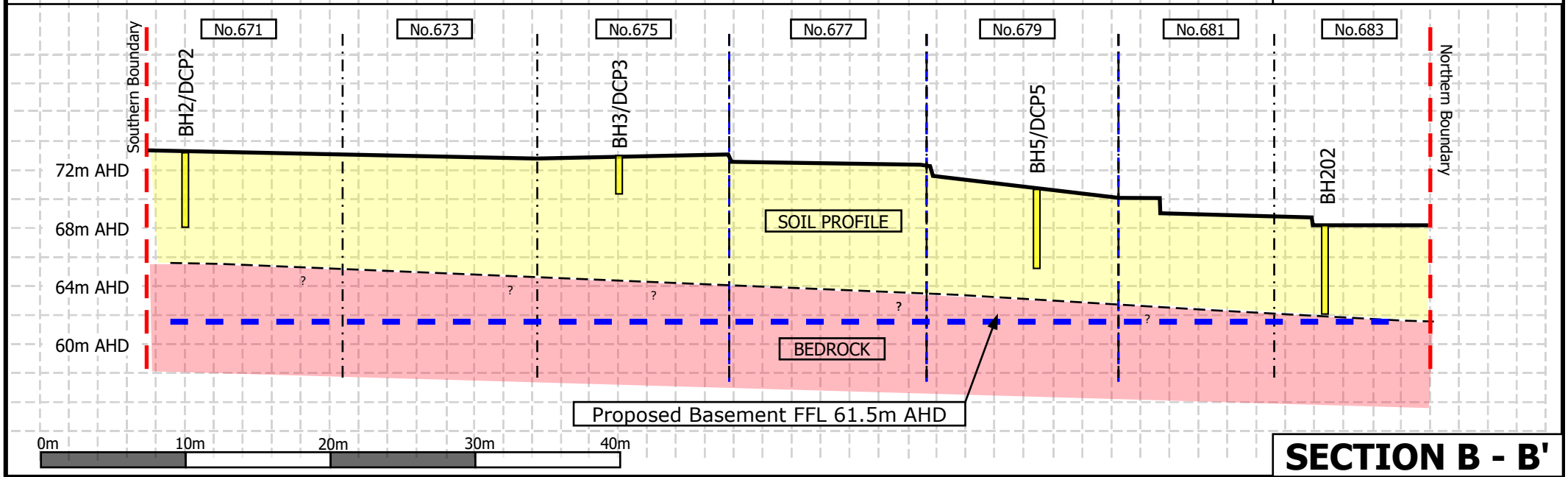
Base Image: Plan Showing Detail and Levels Over Lot 2 DP10314 - Lot 1 DP167942 Being 671-679 Old South Head Road Vaucluse. Prepared by Survplan Drawing 1308CO_MHN Revision B Dated 12.04.21

geo-environmental ENGINEERING
82 BRIDGE STREET
LANE COVE NSW 2066
P - 61 (2) 9420 3361
E - info@geoenvironmental.com.au
www.geoenvironmental.com.au

TITLE: SITE PLAN 671 - 683 Old South Head Road, Vaucluse NSW	SCALE: **N.T.S**	DATE: **8 Oct 2021**	FIGURE No.: **1**
	DRAWN: **S. McC**	JOB No.: **G21071VAU**	REVISION: **A**



SECTION A - A'



SECTION B - B'

geo-environmental ENGINEERING
82 BRIDGE STREET
LANE COVE NSW 2066
P - 61 (2) 9420 3361
E - info@geoenvironmental.com.au
www.geoenvironmental.com.au

TITLE: SECTION PLAN A-A' and B-B'	SCALE: N.T.S	8 Oct 2021	FIGURE No.: 2
	DRAWN: S. McC	JOB No.: G21071VAU	REVISION: A

APPENDIX A

SURVEY AND ARCHITECTURAL PLANS (44 SHEETS)

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GAS METER
- GAS DIRECTION MARKER
- WATER MAIN
- HYDRANT
- RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE Ø 0.225
- HEADWALL
- CLOTHES LINE
- E — OVERHEAD ELECTRICITY LINE
- T — OVERHEAD TELECOM LINE
- S — SEWER LINE

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

AREA LOT B VIDE DP 324744: 37.9 m² BY CALC : 40.98 m²	AREA LOT 4 VIDE DP 192614: 524.8 m² BY CALC : 528.4 m²	
AREA LOT 2 VIDE DP 10314: 474.2 m² BY CALC : 480.3 m²	AREA LOT 1 VIDE DP 168877: 550.1 m² BY CALC : 552.4 m²	AREA LOT 2 VIDE DP 316716: 550.1 m² BY CALC : 550.5 m²
AREA LOT 1 VIDE DP 169310: 499.5 m² BY CALC : 504.3 m²	AREA LOT 1 VIDE DP 167942: 569.1 m² BY CALC : 573.2 m²	AREA LOT 1 VIDE DP 666626: 670.2 m² BY CALC : 678.0 m²

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208		YOUR REF: MEISSEN PROPERTIES	
DRAWING No. 1308CO_MHN.dwg		CLIENT: MHN DESIGN UNION	
SCALE: 1:250 (A1)	SURVEYED M.S.	DRAWN M.S.	CHECKED M.S.
DATUM: A.H.D.	DATE: 5.12.17	DATE: 11.12.17	DATE: 14.12.17
SHEET: 1 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

0 1 2 3 4 5 10m
1 : 100

OLD SOUTH HEAD ROAD

OCEANVIEW AVENUE

No.26-28
SINGLE STOREY
BRICK COTTAGE/SHOP
TILE ROOF

No.22-24
SINGLE STOREY
BRICK COTTAGE/SHOP
TILE ROOF

No.18-20
THREE STOREY
RENDERED UNITS
/COMMERCIAL SHOP
FLAT ROOF

No.671
TWO STOREY
RENDERED COTTAGE
TILE ROOF

No.699
ONE & TWO STOREY
BRICK UNITS AND MIXED
BUSINESS UNITS
METAL ROOF

SINGLE STOREY
BRICK FLATS
TILE ROOF

A
DP324744

B
DP324744

GARAGE
METAL ROOF

GRASS
AREA

GARDEN
AREA

METAL
CARPORT

BRICK GARAGE
METAL ROOF

CONCRETE
DRIVEWAY

FOOTPATH

CONCRETE

No.667A
TWO STOREY
BRICK UNITS
FLAT ROOF

VERANDAH
RL=74.32

PARAPET RL=77.2

PARAPET RL=77.42

BM CUT IN
TOP KERB
RL=71.23 AHD

TREE
0.5Ø
6 S

TREE
0.2Ø
4 S

THE POSITION OF THE SEWER MAIN HAS BEEN SCALED FROM A DIAGRAM SUPPLIED BY SYDNEY WATER CORPORATION AND IS THEREFORE APPROXIMATE ONLY. THE EXACT LOCATION SHOULD BE DETERMINED ON SITE PRIOR TO ANY COMMENCEMENT OF WORKS.

DIAGRAM:
N.T.S.

APPROX TN
M.M.
12.593°

FOR BASIX
PURPOSES

N

DIAL 1100
BEFORE YOU DIG
www.1100.com.au

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

AREA LOT B VIDE DP 324744: BY CALC :	37.9 m² 40.98 m²	AREA LOT 4 VIDE DP 192614: BY CALC :	524.8 m² 528.4 m²
AREA LOT 2 VIDE DP 10314: BY CALC :	474.2 m² 480.3 m²	AREA LOT 1 VIDE DP 168877: BY CALC :	550.1 m² 552.4 m²
AREA LOT 2 VIDE DP 316716: BY CALC :	550.1 m² 550.5 m²		
AREA LOT 1 VIDE DP 169310: BY CALC :	499.5 m² 504.3 m²	AREA LOT 1 VIDE DP 167942: BY CALC :	569.1 m² 573.2 m²
AREA LOT 1 VIDE DP 666626: BY CALC :	670.2 m² 678.0 m²		

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GAS METER
- GAS DIRECTION MARKER
- WATER MAIN
- HYDRANT
- RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE (Ø225)
- HEADWALL
- CLOTHES LINE
- E OVERHEAD ELECTRICITY LINE
- T OVERHEAD TELECOM LINE
- S SEWER LINE

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208		YOUR REF: MEISSEN PROPERTIES	
DRAWING No. 1308CO_MHN.dwg		CLIENT: MHN DESIGN UNION	
SCALE: 1:100 (A1)	SURVEYED M.S. DATE: 5.12.17	DRAWN M.S. DATE: 11.12.17	CHECKED M.S. DATE: 14.12.17
DATUM: A.H.D.			
SHEET: 2 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

A1 0 1 2 3 4 5 10m

1 : 100

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

DIAGRAM: N.T.S.

APPROX TN M.M. 12.593°

FOR BASIX PURPOSES

N

OLD SOUTH HEAD ROAD

CAPTAIN PIPERS ROAD

No.36 SINGLE STOREY RENDERED COTTAGE TILE ROOF

No.34 ONE & TWO STOREY RENDERED COTTAGE TILE ROOF

No.32 SINGLE STOREY BRICK COTTAGE TILE ROOF

No.30 ONE & TWO STOREY BRICK COTTAGE TILE ROOF

No.679 SINGLE STOREY RENDERED COTTAGE TILE ROOF

No.677 ONE & TWO STOREY RENDERED COTTAGE TILE ROOF

No.675 ONE & TWO STOREY RENDERED COTTAGE TILE ROOF

No.673 SINGLE STOREY RENDERED COTTAGE

DP167942

DP168877

DIAL 1100 BEFORE YOU DIG www.1100.com.au

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

AREA LOT B VIDE DP 324744: BY CALC :	37.9 m² 40.98 m²	AREA LOT 4 VIDE DP 192614: BY CALC :	524.8 m² 528.4 m²	
AREA LOT 2 VIDE DP 10314: BY CALC :	474.2 m² 480.3 m²	AREA LOT 1 VIDE DP 168877: BY CALC :	550.1 m² 552.4 m²	AREA LOT 2 VIDE DP 316716: BY CALC : 550.1 m² 550.5 m²
AREA LOT 1 VIDE DP 169310: BY CALC :	499.5 m² 504.3 m²	AREA LOT 1 VIDE DP 167942: BY CALC :	569.1 m² 573.2 m²	AREA LOT 1 VIDE DP 666626: BY CALC : 670.2 m² 678.0 m²

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208		YOUR REF: MEISSEN PROPERTIES	
DRAWING No. 1308CO_MHN.dwg		CLIENT: MHN DESIGN UNION	
SCALE: 1:100 (A1)	SURVEYED M.S. DATE: 5.12.17	DRAWN M.S. DATE: 11.12.17	CHECKED M.S. DATE: 14.12.17
DATUM: A.H.D.			
SHEET: 3 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the Surveying and Spatial Information Act 2002

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GM GAS METER
- G GAS DIRECTION MARKER
- W WATER MAIN
- H HYDRANT
- R RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE
- HEADWALL
- CLOTHES LINE
- E OVERHEAD ELECTRICITY LINE
- T OVERHEAD TELECOM LINE
- S SEWER LINE

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

AREA LOT B
VIDE DP 324744: 37.9 m²
BY CALC : 40.98 m²

AREA LOT 4
VIDE DP 192614: 524.8 m²
BY CALC : 528.4 m²

AREA LOT 2
VIDE DP 10314: 474.2 m²
BY CALC : 480.3 m²

AREA LOT 1
VIDE DP 168877: 550.1 m²
BY CALC : 552.4 m²

AREA LOT 2
VIDE DP 316716: 550.1 m²
BY CALC : 550.5 m²

AREA LOT 1
VIDE DP 169310: 499.5 m²
BY CALC : 504.3 m²

AREA LOT 1
VIDE DP 167942: 569.1 m²
BY CALC : 573.2 m²

AREA LOT 1
VIDE DP 666626: 670.2 m²
BY CALC : 678.0 m²

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GAS METER
- GAS DIRECTION MARKER
- WATER MAIN
- HYDRANT
- RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE
- HANDWALL
- CLOTHES LINE
- E — OVERHEAD ELECTRICITY LINE
- T — OVERHEAD TELECOM LINE
- S — SEWER LINE

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208		YOUR REF: MEISSEN PROPERTIES	
DRAWING No. 1308CO_MHN.dwg		CLIENT: MHN DESIGN UNION	
SCALE: 1:100 (A1)	SURVEYED M.S. DATE: 5.12.17	DRAWN M.S. DATE: 11.12.17	CHECKED M.S. DATE: 14.12.17
DATUM: A.H.D.			
SHEET: 4 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

DIAL 1100 BEFORE YOU DIG
www.1100.com.au

1 : 100

AREA LOT B
VIDE DP 324744: 37.9 m²
BY CALC : 40.98 m²

AREA LOT 4
VIDE DP 192614: 524.8 m²
BY CALC : 528.4 m²

AREA LOT 2
VIDE DP 10314: 474.2 m²
BY CALC : 480.3 m²

AREA LOT 1
VIDE DP 168877: 550.1 m²
BY CALC : 552.4 m²

AREA LOT 2
VIDE DP 316716: 550.1 m²
BY CALC : 550.5 m²

AREA LOT 1
VIDE DP 169310: 499.5 m²
BY CALC : 504.3 m²

AREA LOT 1
VIDE DP 167942: 569.1 m²
BY CALC : 573.2 m²

AREA LOT 1
VIDE DP 666626: 670.2 m²
BY CALC : 678.0 m²

SURVPLAN
SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208	YOUR REF: MEISSEN PROPERTIES		
DRAWING No. 1308CO_MHN.dwg	CLIENT: MHN DESIGN UNION		
SCALE: 1:100 (A1)	SURVEYED M.S. DATE: 5.12.17	DRAWN M.S. DATE: 11.12.17	CHECKED M.S. DATE: 14.12.17
DATUM: A.H.D.			
SHEET: 5 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

LEGEND

TELSTRA PILLAR
TELSTRA MARKER POST
TELSTRA PIT
POWER POLE
ELECTRICAL PILLAR
POWER LIGHT POLE
LIGHT POLE
GAS METER
GAS DIRECTION MARKER
WATER MAIN
HYDRANT
RECYCLED WATER
WATER METER
STOP VALVE
WATER TAP
STREET SIGN
PRAM CROSSING
VEHICLE CROSSING
TREE: Ø DIAMETER S SPREAD
SEWER MANHOLE
SEWER VENT
SEWER LAMPHOLE
STORMWATER PIT
STORMWATER GRATE
SURFACE INLET PIT
STORMWATER PIPE INCLUDING PIPE SIZE
HEADWALL
CLOTHES LINE
E — OVERHEAD ELECTRICITY LINE
T — OVERHEAD TELECOM LINE
S — SEWER LINE

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

0 1 2 3 4 5 10m
1 : 100

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

DIAGRAM: N.T.S.
APPROX TN M.M. 12.593°
FOR BASIX PURPOSES

FOR WINDOW DETAILS PLEASE SEE ELEVATION PLAN

No.679
SINGLE STOREY
RENDERED COTTAGE
TILE ROOF

No.677
ONE & TWO STOREY
RENDERED COTTAGE
TILE ROOF

No.675
ONE & TWO STOREY
RENDERED COTTAGE
TILE ROOF

No.673
SINGLE STOREY

No.2
THREE & FOUR STOREY
BRICK UNITS
FLAT ROOF

1 DP167942
1 DP168877
4 DP192614
1 DP169310

OLD SOUTH HEAD ROAD

DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

AREA LOT B VIDE DP 324744: BY CALC :	37.9 m² 40.98 m²
AREA LOT 4 VIDE DP 192614: BY CALC :	524.8 m² 528.4 m²
AREA LOT 2 VIDE DP 10314: BY CALC :	474.2 m² 480.3 m²
AREA LOT 1 VIDE DP 168877: BY CALC :	550.1 m² 552.4 m²
AREA LOT 2 VIDE DP 316716: BY CALC :	550.1 m² 550.5 m²
AREA LOT 1 VIDE DP 169310: BY CALC :	499.5 m² 504.3 m²
AREA LOT 1 VIDE DP 167942: BY CALC :	569.1 m² 573.2 m²
AREA LOT 1 VIDE DP 666626: BY CALC :	670.2 m² 678.0 m²

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208		YOUR REF: MEISSEN PROPERTIES	
DRAWING No. 1308CO_MHN.dwg		CLIENT: MHN DESIGN UNION	
SCALE: 1:100 (A1)	SURVEYED M.S. DATE: 5.12.17	DRAWN M.S. DATE: 11.12.17	CHECKED M.S. DATE: 14.12.17
DATUM: A.H.D.			
SHEET: 6 OF 9			

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GM GAS METER
- G GAS DIRECTION MARKER
- W WATER MAIN
- H HYDRANT
- R RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE Ø 225
- HEADWALL
- CLOTHES LINE
- E OVERHEAD ELECTRICITY LINE
- T OVERHEAD TELECOM LINE
- S SEWER LINE

A1

L.G.A. : WAVERLEY
PARISH : ALEXANDRIA
COUNTY : CUMBERLAND

AREA LOT B VIDE DP 324744: 37.9 m² BY CALC : 40.98 m²	AREA LOT 4 VIDE DP 192614: 524.8 m² BY CALC : 528.4 m²

AREA LOT 2 VIDE DP 10314: 474.2 m² BY CALC : 480.3 m²	AREA LOT 1 VIDE DP 168877: 550.1 m² BY CALC : 552.4 m²	AREA LOT 2 VIDE DP 316716: 550.1 m² BY CALC : 550.5 m²
AREA LOT 1 VIDE DP 169310: 499.5 m² BY CALC : 504.3 m²	AREA LOT 1 VIDE DP 167942: 569.1 m² BY CALC : 573.2 m²	AREA LOT 1 VIDE DP 666626: 670.2 m² BY CALC : 678.0 m²

VAUGHAN WADY
REGISTERED SURVEYOR #8684
Surveyor Registered under the
Surveying and Spatial Information Act 2002

ORIGIN OF LEVELS :
SSM 60860 RL=65.336 (AHD) FOUND NEAR THE INTERSECTION OF MILITARY ROAD & OLD SOUTH HEAD ROAD.
ACCURACY OF ORIGIN : ± 0.001m

SURVPLAN SURVEYING // PLANNING // DESIGN
ABN 83 914 613 296
PO BOX 242 HELENSBURGH NSW 2508
PH 0420 944 413 Email: matt@survplan.com.au

Rev.	Amendments	Date
A	ADJ.BUILDING DESCRIPTION	17.09.18
B	ADDITIONAL SURVEY INFORMATION	12.04.21

PLAN SHOWING DETAIL AND LEVELS OVER LOT 2 DP10314 - LOT 1 DP167942 BEING No.671-679 OLD SOUTH HEAD RD VAUCLUSE FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 1208	YOUR REF: MEISSEN PROPERTIES		
DRAWING No. 1308CO_MHN.dwg	CLIENT: MHN DESIGN UNION		
SCALE: 1:100 (A1)	SURVEYED M.S.	DRAWN M.S.	CHECKED M.S.
DATUM: A.H.D.	DATE:	DATE:	DATE:
SHEET: 7 OF 9	5.12.17	11.12.17	14.12.17

WARNING:

1. SURVPLAN OWNS THE RIGHTS TO THIS SURVEY AND RELATED DOCUMENTS. THE INFORMATION PROVIDED IN THIS DOCUMENT IS FOR THE CLIENT NAMED WITHIN. USE OF THIS PLAN BY ANY OTHER PERSON/S IS NOT PERMITTED UNLESS WRITTEN CONSENT IS PROVIDED BY SURVPLAN.
2. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A IDENTIFICATION SURVEY.
3. ALL DETAILS AND FEATURES SHOWN HAVE BEEN PLOTTED IN RELATION TO THE OCCUPATIONS, FENCING AND/OR OLD BRICK/RENDERED WALLS. AND ARE APPROXIMATE ONLY. A BOUNDARY SURVEY SHOULD BE DONE TO DETERMINE THE POSITIONS ACCURATELY.
4. SERVICES SHOWN HEREON ARE THOSE THAT WERE VISIBLE AT THE TIME OF SURVEY AND HAVE BEEN LOCATED BY FIELD SURVEY. FURTHER SERVICES MAY BE PRESENT. PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON SITE THE RELEVANT AUTHORITIES SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. DIAL BEFORE YOU DIG!
5. THIS SURVEY SHOULD NOT BE USED TO SETOUT BOUNDARY FENCING OR BUILDING WORKS NEAR OR ON THE BOUNDARIES. A SETOUT PLACING ACCURATE MAKES SHOULD BE CARRIED OUT PRIOR TO ANY BUILDING WORKS.
6. THE CONTOUR INTERVAL IS 0.2m. UNLESS SHOWN OTHERWISE. THE CONTOURS HAVE BEEN PLOTTED FROM INTERPOLATION METHODS.

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
1	75.5	1.54	0.92	CLEAR
2	73.01	1.1	1.07	CLEAR
3	72.1	2.05	0.85	DOOR
4	73.01	1.1	1.1	CLEAR
5	73.01	1.1	1.2	CLEAR
6	69.8	2.1	1.1	DOOR
7	71.72	1.46	2.8	CLEAR
8	71.72	1.46	2.8	CLEAR
9	71.0	2.18	1.9	CLEAR
10	71.0	2.18	1.9	CLEAR
11	70.83	2.5	4.53	CLEAR

WINDOW	SILL RL	HEIGHT	WIDTH	GLASS TYPE
11	70.83	2.5	4.53	CLEAR
12	70.83	2.5	4.53	CLEAR
13	70.99	2.28	7.96	CLEAR
14	73.87	1.2	2	CLEAR
15	77.3	1.6	1.9	CLEAR
16	77.3	1.6	1.9	CLEAR
17	74.18	0.94	2.18	CLEAR
18	73.3	1.14	1.2	CLEAR
19	71.97	1.24	1	CLEAR
20	73.07	1.22	2.16	CLEAR
21	73.07	1.22	2.16	CLEAR

LEGEND

- TELSTRA PILLAR
- TELSTRA MARKER POST
- TELSTRA PIT
- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- GAS METER
- GAS DIRECTION MARKER
- WATER MAIN
- HYDRANT
- RECYCLED WATER
- WATER METER
- STOP VALVE
- WATER TAP
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- TREE: Ø DIAMETER S SPREAD
- SEWER MANHOLE
- SEWER VENT
- SEWER LAMPHOLE
- STORMWATER PIT
- STORMWATER GRATE
- SURFACE INLET PIT
- STORMWATER PIPE INCLUDING PIPE SIZE (Ø 0.225)
- HEADWALL
- CLOTHES LINE
- E — OVERHEAD ELECTRICITY LINE
- T — OVERHEAD TELECOM LINE
- S — SEWER LINE

VAUCLUSE SENIORS LIVING
ARCHITECTURAL DA DRAWINGS

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

Drawing List

Sheet Number	Sheet Series	Sheet Name	Sheet Status	Current Revision
A00.000	A00	COVER PAGE - DRAWING LIST	DA ISSUE	A
A00.001	A00	EXTERNAL PERSPECTIVE 01	DA ISSUE	A
A00.002	A00	EXTERNAL PERSPECTIVE 02	DA ISSUE	A
A00.003	A00	EXTERNAL PERSPECTIVE 03	DA ISSUE	A
A00.004	A00	EXTERNAL PERSPECTIVE 04	DA ISSUE	A
A01.001	A01	SITE PLAN	DA ISSUE	A
A01.002	A01	EXISTING CONDITIONS	DA ISSUE	A
A01.003	A01	DEMOLITION	DA ISSUE	A
A03.001	A03	GROUND LOWER PLAN	DA ISSUE	A
A03.002	A03	GROUND UPPER PLAN	DA ISSUE	A
A03.003	A03	LEVEL 01 PLAN	DA ISSUE	A
A03.004	A03	LEVEL 02 PLAN	DA ISSUE	A
A03.005	A03	LEVEL 03 PLAN	DA ISSUE	A
A03.006	A03	ROOF PLAN	DA ISSUE	A
A03.007	A03	BASEMENT 01	DA ISSUE	A
A03.008	A03	BASEMENT 02	DA ISSUE	A
A09.001	A09	BUILDING ELEVATION	DA ISSUE	A
A09.002	A09	BUILDING ELEVATION	DA ISSUE	A
A10.001	A10	BUILDING SECTION	DA ISSUE	A
A10.002	A10	BUILDING SECTION	DA ISSUE	A
A10.003	A10	BUILDING SECTION	DA ISSUE	A
A10.004	A10	BUILDING SECTION	DA ISSUE	A
A10.005	A10	BUILDING SECTION	DA ISSUE	A
A11.001	A11	FACADE TYPE 01	DA ISSUE	A
A11.002	A11	FACADE TYPE 02	DA ISSUE	A
A11.003	A11	FACADE TYPE 03	DA ISSUE	A
A13.001	A13	APARTMENT TYPE - 3B	DA ISSUE	A
A13.002	A13	APARTMENT TYPE - 3B	DA ISSUE	A
A13.003	A13	APARTMENT TYPE - 2B & 1B	DA ISSUE	A
A13.004	A13	APARTMENT TYPE - 3B PENTHOUSE	DA ISSUE	A
A21.001	A21	SHADOW DIAGRAMS - PLAN	DA ISSUE	A
A21.002	A21	SHADOW DIAGRAM - PERSPECTIVE	DA ISSUE	A
A22.001	A22	AREA PLANS	DA ISSUE	A
A22.002	A22	AREA PLANS	DA ISSUE	A
A22.003	A22	AREA PLANS	DA ISSUE	A
A41.001	A41	MATERIAL SCHEDULE	DA ISSUE	A

Grand total: 36

DA ISSUE

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A00
COVER PAGE - DRAWING LIST

Status	CONCEPT		
Scale	@ A1		
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:29:19 AM		
BIM			
Drawing no.	A00.000	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

BATESSMART™

OLD SOUTH HEAD ROAD
NORTHERN STREET PERSPECTIVE

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A00
EXTERNAL PERSPECTIVE 01

Status	CONCEPT
Scale	@ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:29:29 AM
BIM	
Drawing no.	A00.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

OLD SOUTH HEAD ROAD
SOUTHERN STREET PERSPECTIVE

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A00
EXTERNAL PERSPECTIVE 02

Status	CONCEPT
Scale	@ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:30:04 AM
BIM	
Drawing no.	A00.002
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

OLD SOUTH HEAD ROAD
STREET ELEVATION

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A00
EXTERNAL PERSPECTIVE 03

Status	CONCEPT
Scale	@ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:30:28 AM
BIM	
Drawing no.	A00.003
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

RESIDENTIAL COURTYARD

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A00
EXTERNAL PERSPECTIVE 04

Status	CONCEPT
Scale	@ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:41:43 AM
BIM	
Drawing no.	A00.004
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A01
SITE PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:31:01 AM
BIM	
Drawing no.	A01.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

20 OLD SOUTH HEAD ROAD
THREE STOREY RENDERED UNITS COMMERCIAL

24 OLD SOUTH HEAD ROAD
SINGLE STOREY BRICK COTTAGE

28 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

30 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK COTTAGE

32 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

34 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

36 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

38 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

40 OLD SOUTH HEAD ROAD

OLD SOUTH HEAD ROAD

RL 70.60
RL 71.39
RL 71.21
RL 70.87
RL 70.50
RL 70.00
RL 69.09
RL 68.40
RL 67.79

669 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK UNITS MIXED USED

671 OLD SOUTH HEAD ROAD
TWO STOREY RENDERED COTTAGE

673 OLD SOUTH HEAD ROAD
ONE STOREY RENDERED COTTAGE

675 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

677 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

679 OLD SOUTH HEAD ROAD
ONE STOREY RENDERED COTTAGE

681 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

683 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK COTTAGE

687 OLD SOUTH HEAD ROAD
THREE & FIVE STOREY BRICK UNITS

RL 76.7

RL 72.48
RL 72.72
RL 78.11
RL 66.08
RL 67.05
RL 84.49

2 OCEANVIEW AVENUE
TWO & FOUR STOREY BRICK UNITS

4 OCEANVIEW AVENUE

17 WILFIELD AVENUE
15 WILFIELD AVENUE
13 WILFIELD AVENUE
11 WILFIELD AVENUE
09 WILFIELD AVENUE
07 WILFIELD AVENUE
05 WILFIELD AVENUE
03 WILFIELD AVENUE

DA ISSUE

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A01
EXISTING CONDITIONS

Status	CONCEPT		
Scale	1 : 200	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:31:19 AM		
BIM			
Drawing no.	A01.002	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

Legend - Demolition Plan

- EXISTING TREES
- TREES TO BE REMOVED OR REPLANTED
- TO BE DEMOLISHED

OLD SOUTH HEAD ROAD

20 OLD SOUTH HEAD ROAD
THREE STOREY RENDERED UNITS COMMERCIAL

24 OLD SOUTH HEAD ROAD
SINGLE STOREY BRICK COTTAGE

28 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

30 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK COTTAGE

32 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

34 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

36 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

38 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

40 OLD SOUTH HEAD ROAD

669 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK UNITS MIXED USED

671 OLD SOUTH HEAD ROAD
TWO STOREY RENDERED COTTAGE

673 OLD SOUTH HEAD ROAD
ONE STOREY RENDERED COTTAGE

675 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

677 OLD SOUTH HEAD ROAD
ONE & TWO STOREY RENDERED COTTAGE

679 OLD SOUTH HEAD ROAD
ONE STOREY RENDERED COTTAGE

681 OLD SOUTH HEAD ROAD
ONE STOREY BRICK COTTAGE

683 OLD SOUTH HEAD ROAD
ONE & TWO STOREY BRICK COTTAGE

687 OLD SOUTH HEAD ROAD
THREE & FIVE STOREY BRICK UNITS

2 OCEANVIEW AVENUE
TWO & FOUR STOREY BRICK UNITS

4 OCEANVIEW AVENUE

17 WILFIELD AVENUE

15 WILFIELD AVENUE

13 WILFIELD AVENUE

11 WILFIELD AVENUE

09 WILFIELD AVENUE

07 WILFIELD AVENUE

05 WILFIELD AVENUE

03 WILFIELD AVENUE

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A01
DEMOLITION

Status	CONCEPT
Scale	As indicated @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:31:31 AM
BIM	
Drawing no.	A01.003
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
GROUND LOWER PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:31:54 AM
BIM	
Drawing no.	A03.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
GROUND UPPER PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:32:35 AM
BIM	
Drawing no.	A03.002
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
LEVEL 01 PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:32:59 AM
BIM	
Drawing no.	A03.003
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
LEVEL 02 PLAN

Status	CONCEPT		
Scale	1 : 200	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:33:20 AM		
BIM			
Drawing no.	A03.004	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
LEVEL 03 PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:33:36 AM
BIM	
Drawing no.	A03.005
Revision	A

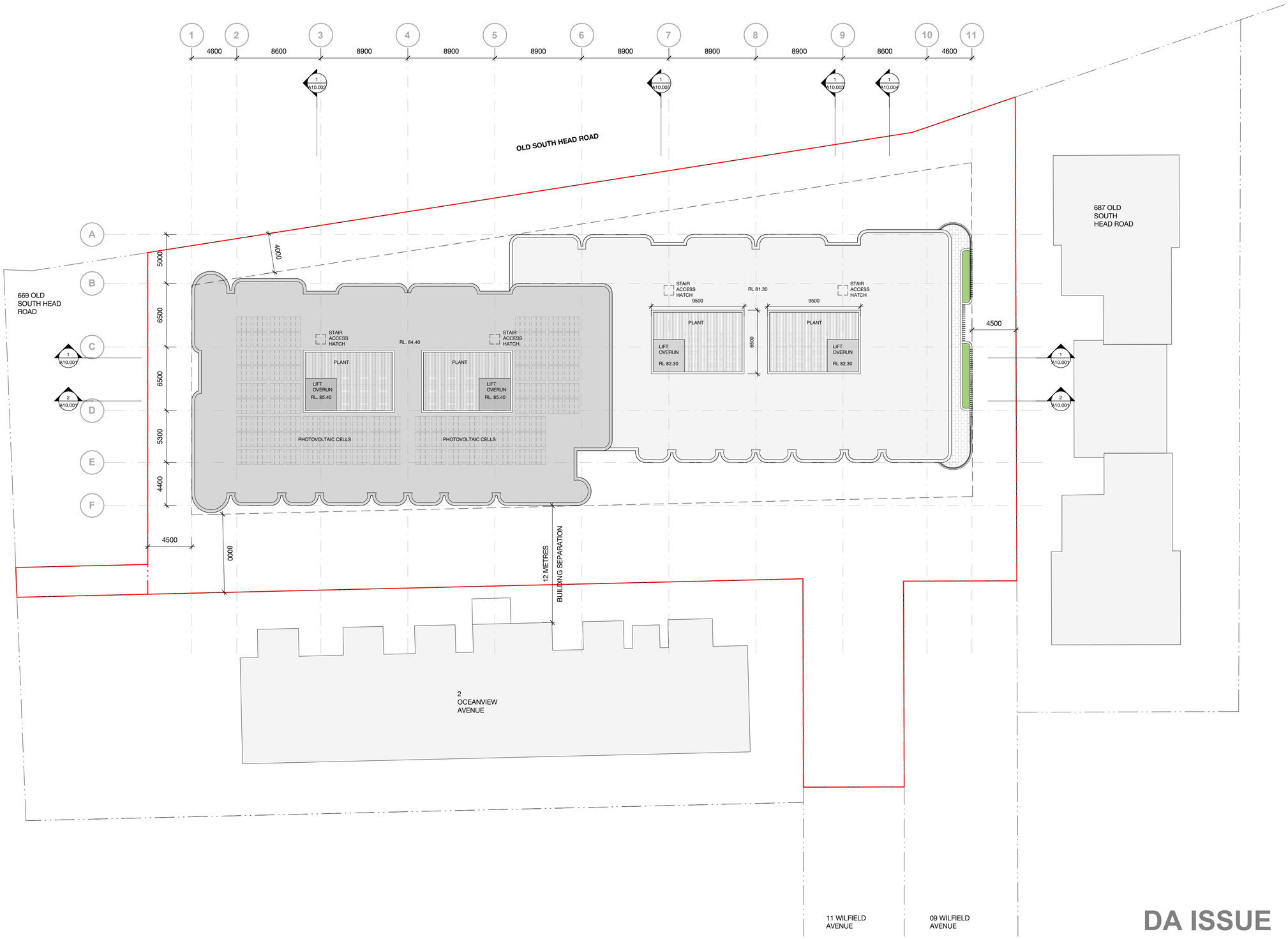
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™



Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
ROOF PLAN

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:33:43 AM
BIM	

Drawing no. A03.006

Revision A

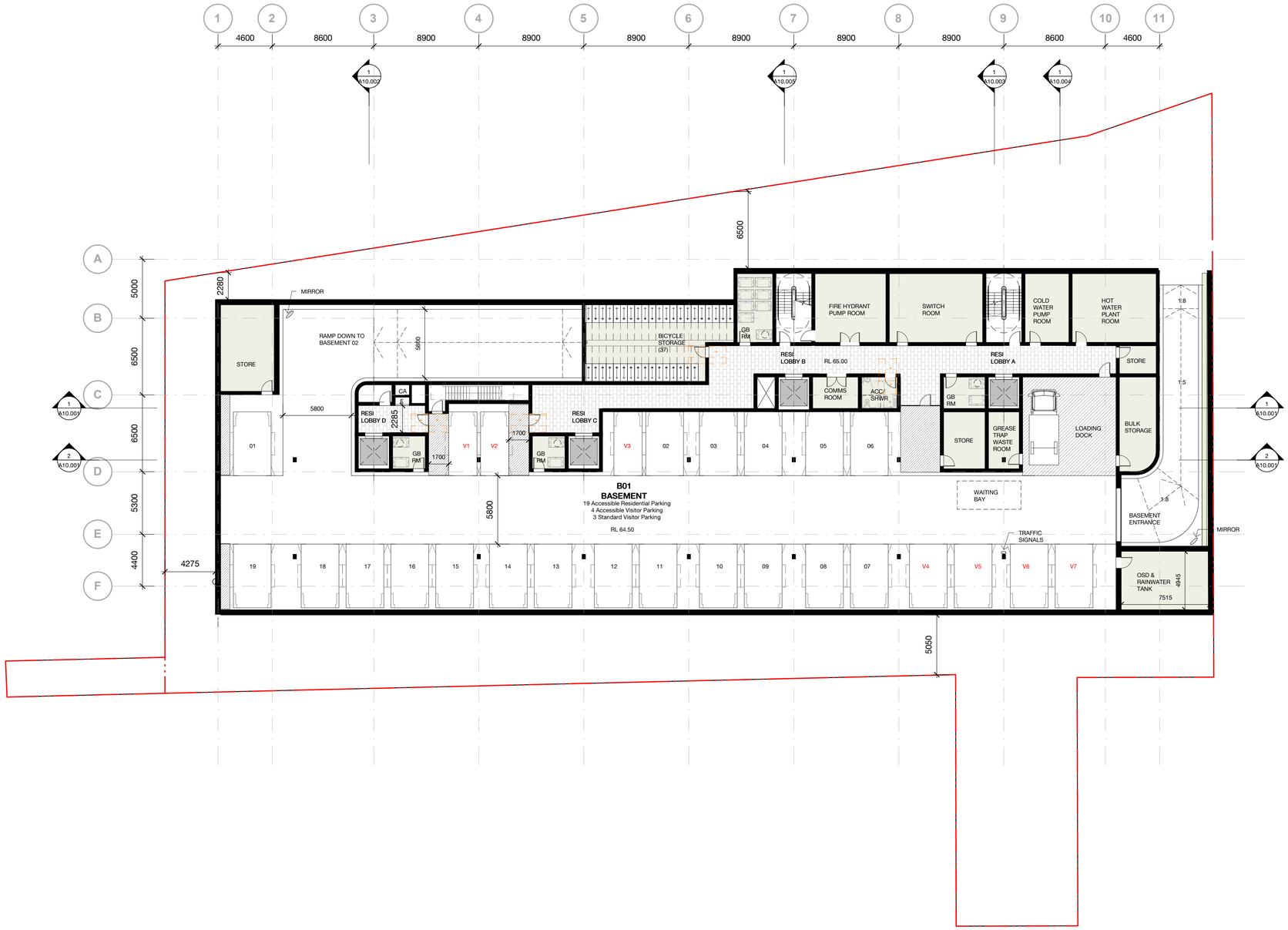
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
BASEMENT 01

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:33:51 AM
BIM	
Drawing no.	A03.007
Revision	A

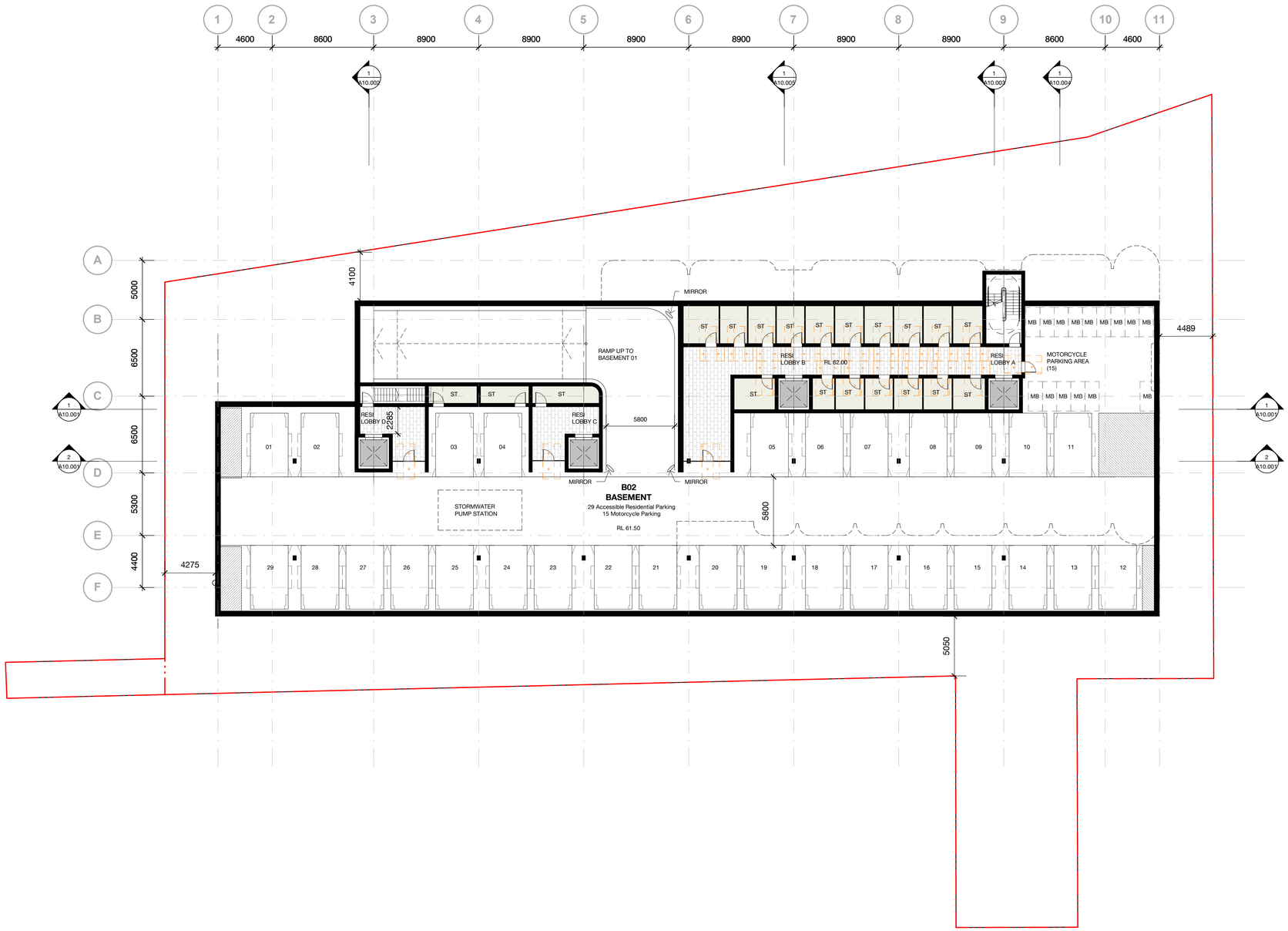
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
3	21.10.01	ISSUE FOR INFORMATION	SH	
2	21.09.23	ISSUE FOR INFORMATION	SH	
1	21.09.09	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A03
BASEMENT 02

Status	CONCEPT		
Scale	1 : 200	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:33:58 AM		
BIM			
Drawing no.	A03.008	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

1 NORTH ELEVATION

1 : 200

2 WEST ELEVATION

1 : 200

Legend

1. BRICK
2. CONCRETE SLAB
3. TERRACOTTA SCREEN
4. GLASS BRICKS
5. GLASS – FIXED, AWNING WINDOWS AND SLIDING DOORS
6. METAL 01 - GLAZING FRAMES
7. METAL 02 - BALUSTRADE HANDRAILS
8. LANDSCAPE PLANTING

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
2	21.10.01	ISSUE FOR INFORMATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A09
BUILDING ELEVATION

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:34:06 AM		
BIM			
Drawing no.	A09.001	Revision	A

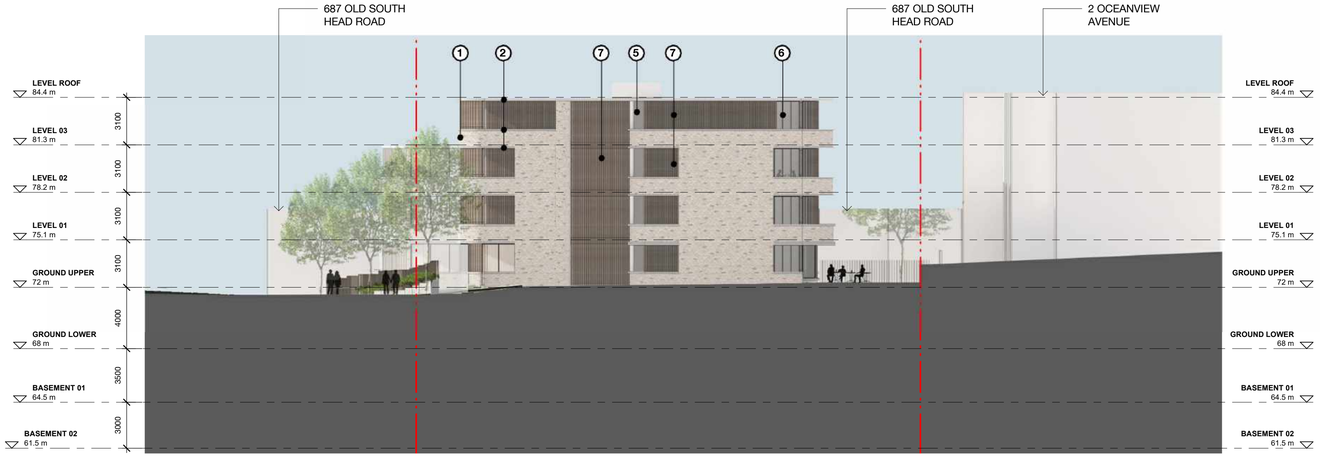
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



1 SOUTH ELEVATION
1 : 200

2 EAST ELEVATION
1 : 200

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

Legend

1. BRICK
2. CONCRETE SLAB
3. TERRACOTTA SCREEN
4. GLASS BRICKS
5. GLASS – FIXED, AWNING WINDOWS AND SLIDING DOORS
6. METAL 01 - GLAZING FRAMES
7. METAL 02 - BALUSTRADE HANDRAILS
8. LANDSCAPE PLANTING

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
2	21.10.01	ISSUE FOR INFORMATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING 671- 683 OSH RD VAUCLUSE

A09
BUILDING ELEVATION

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:34:22 AM		
BIM			
Drawing no.	A09.002	Revision	A

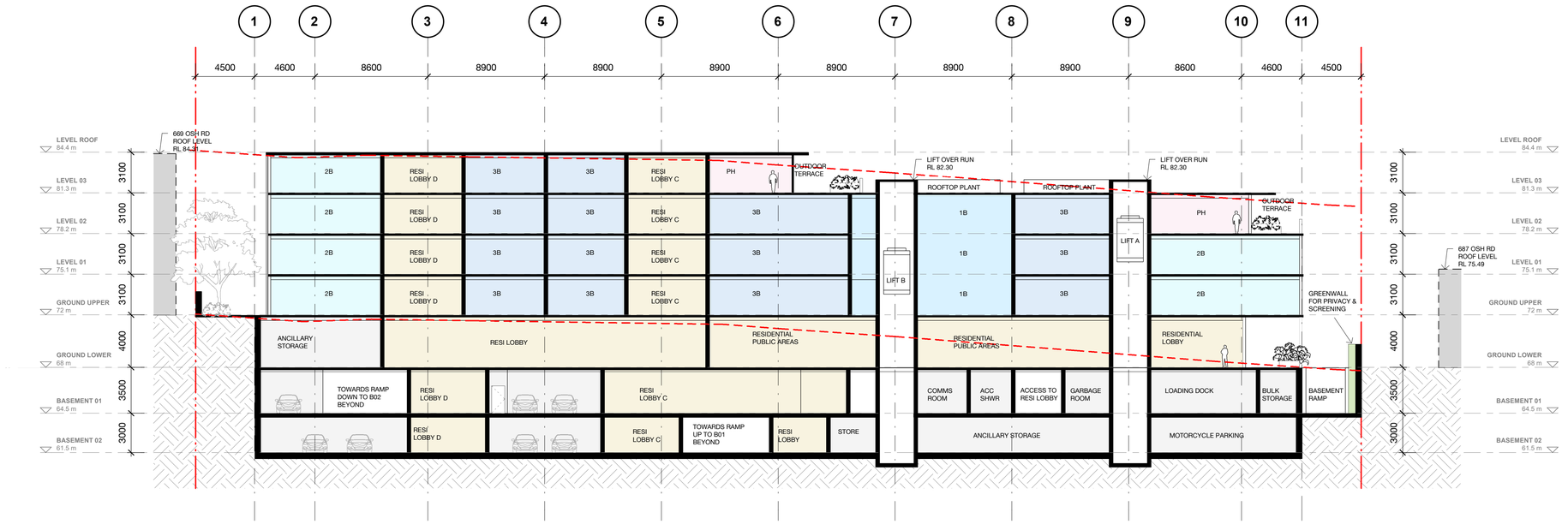
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

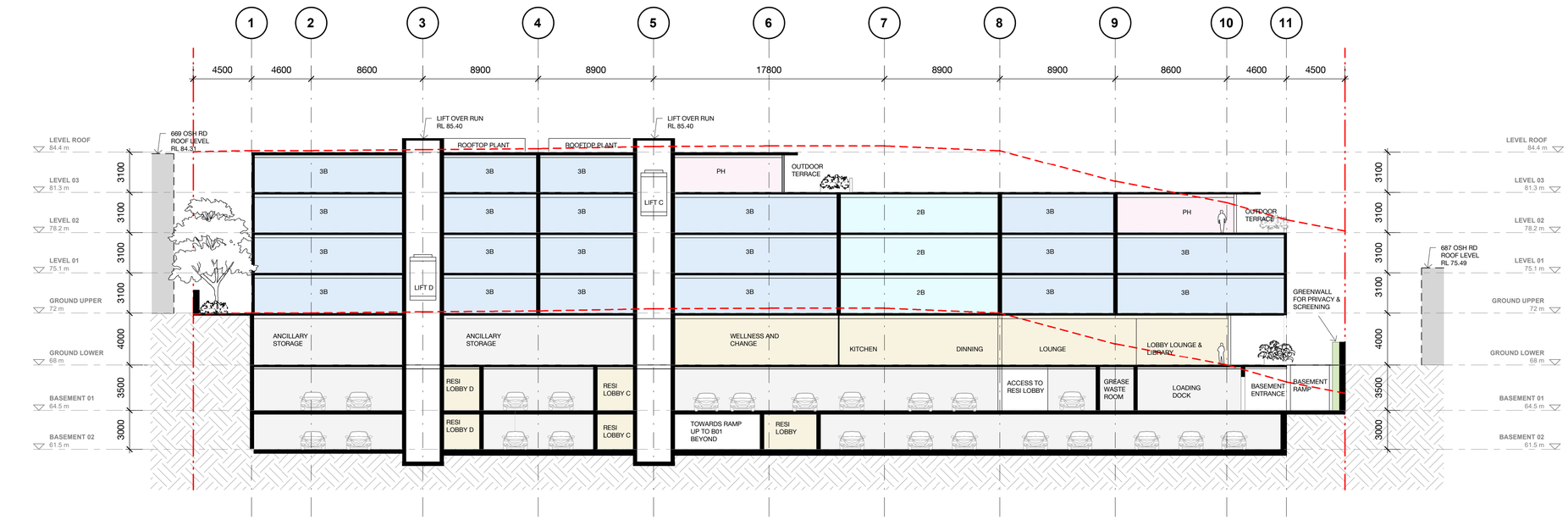
DA ISSUE

BATESSMART



1 SECTION 01

1 : 200



2 SECTION 02

1 : 200

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
3	21.10.01	ISSUE FOR INFORMATION	SH	
2	21.09.23	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A10
BUILDING SECTION

Status	CONCEPT		
Scale	1 : 200	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:34:40 AM		
BIM			
Drawing no.	A10.001	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

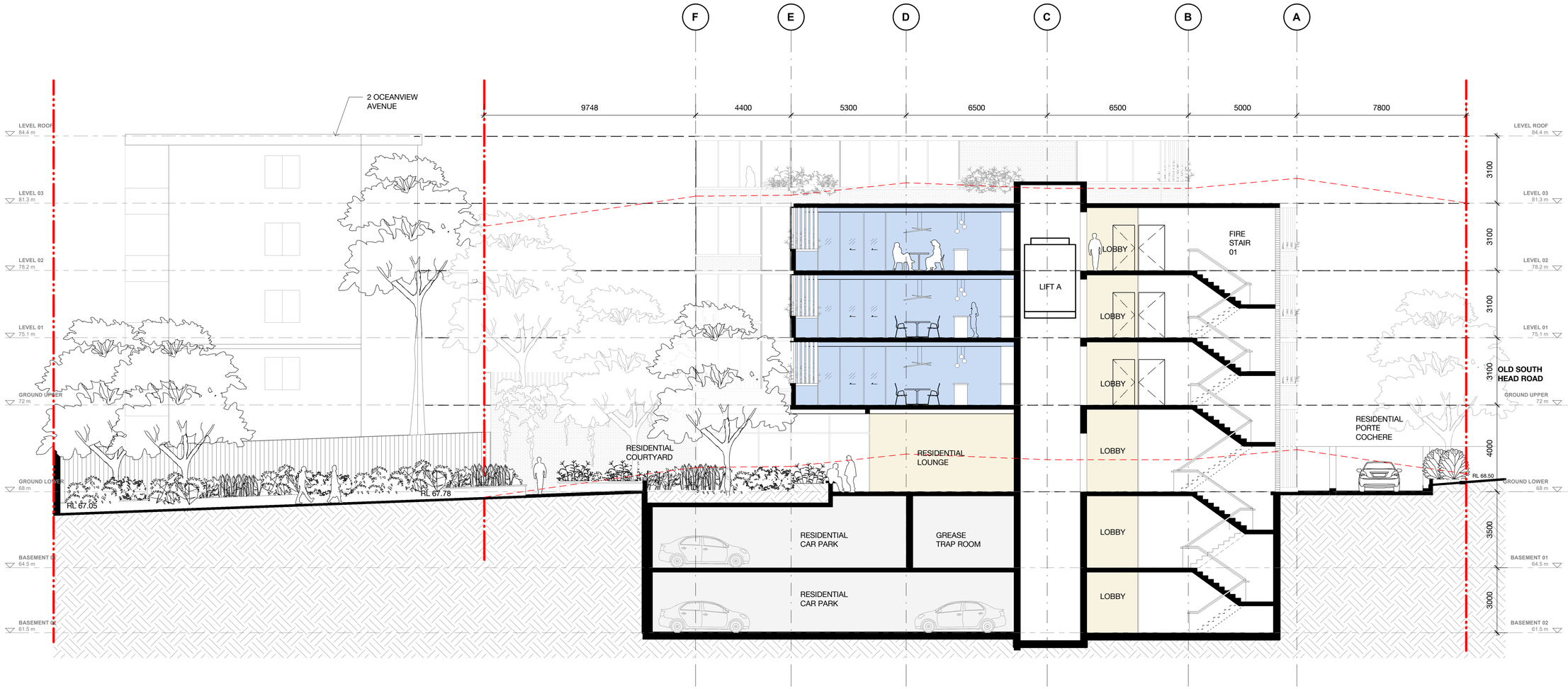
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt



1 SECTION 03

1 : 100

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
3	21.10.01	ISSUE FOR INFORMATION	SH	
2	21.09.23	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A10
BUILDING SECTION

Status	CONCEPT		
Scale	1 : 100	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:34:48 AM		
BIM			
Drawing no.	A10.002	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

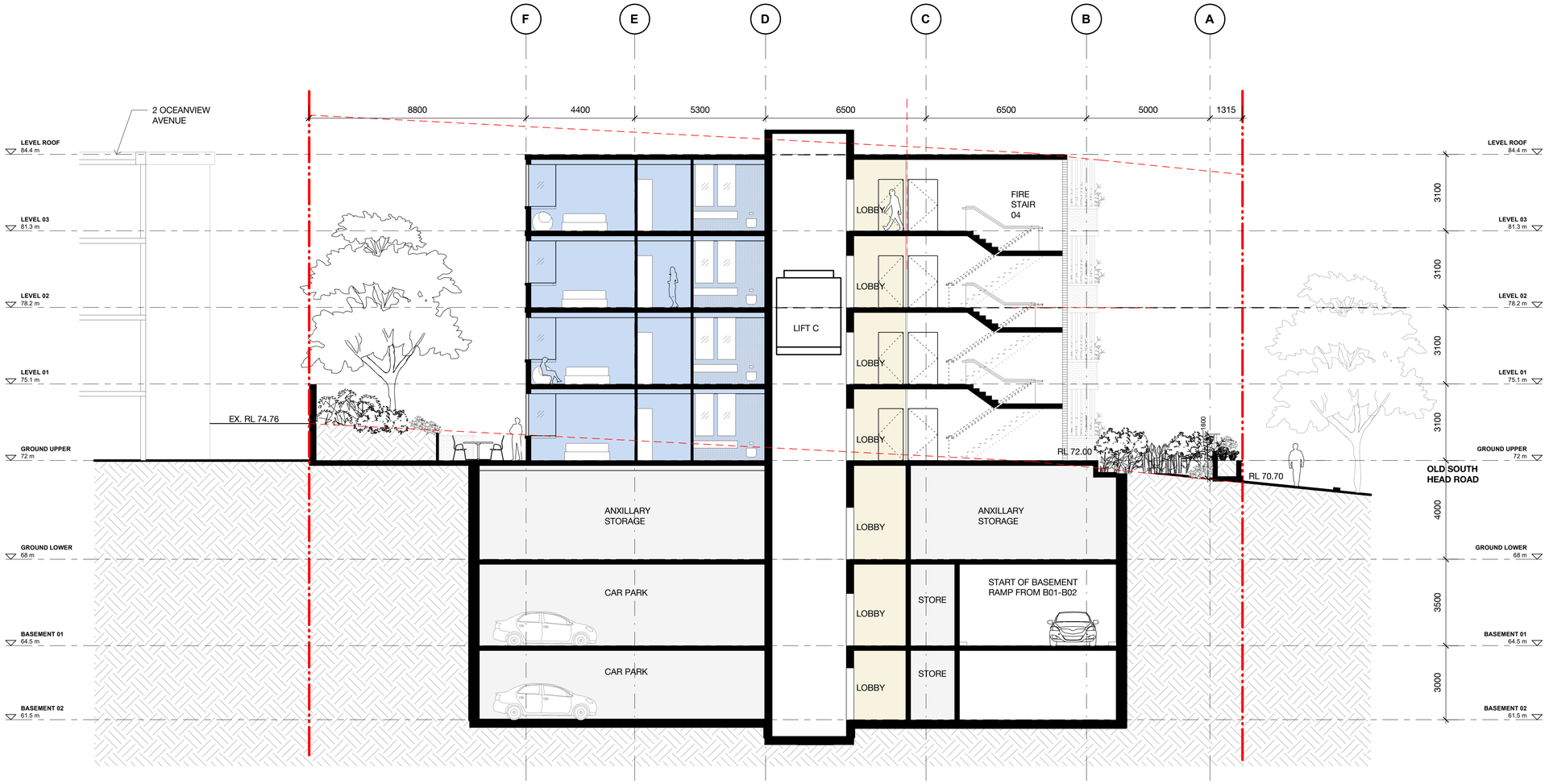
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt



1 SECTION 04
1 : 100

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
3	21.10.01	ISSUE FOR INFORMATION	SH	
2	21.09.23	ISSUE FOR INFORMATION	SH	
1	21.09.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A10
BUILDING SECTION

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:35:21 AM
BIM	
Drawing no.	A10.003
Revision	A

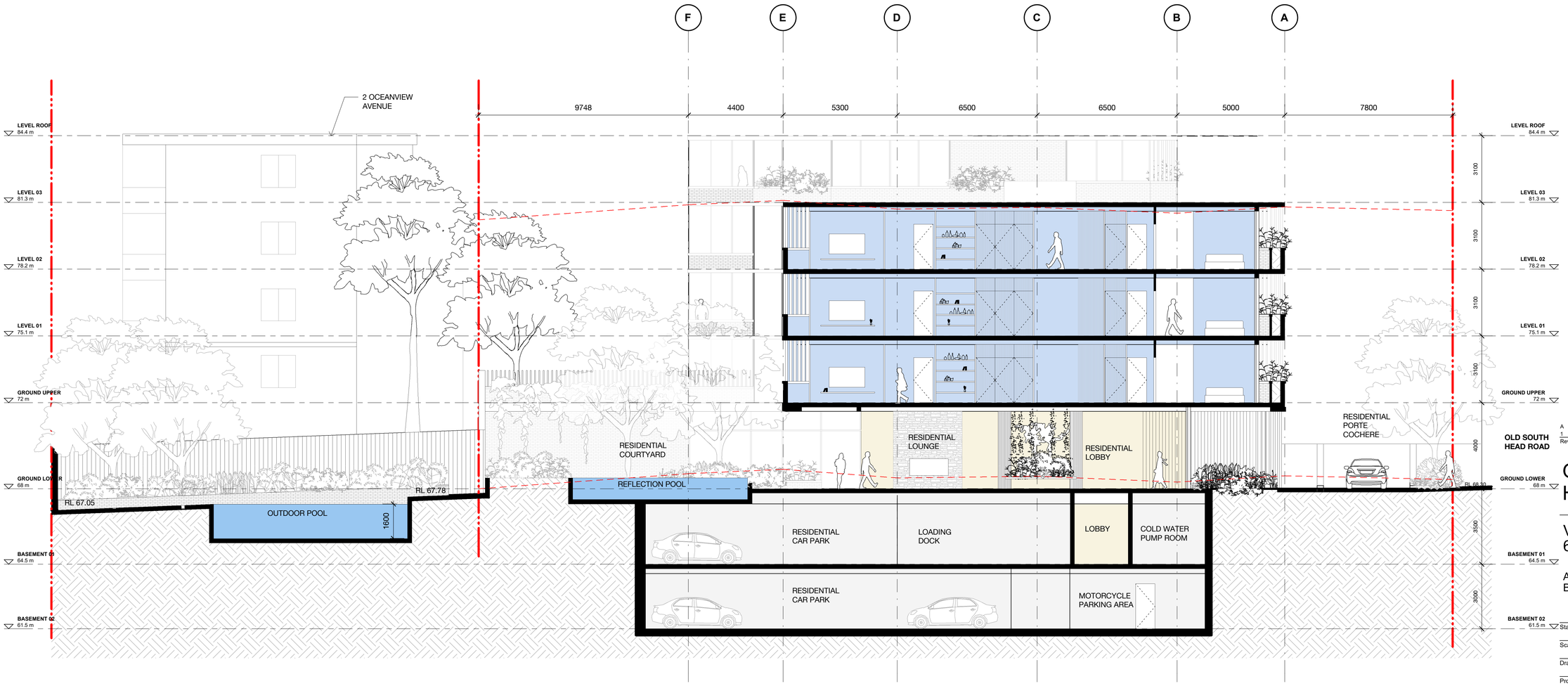
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.10.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A10
BUILDING SECTION

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	Author
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:35:30 AM
BIM	
Drawing no.	A10.004
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

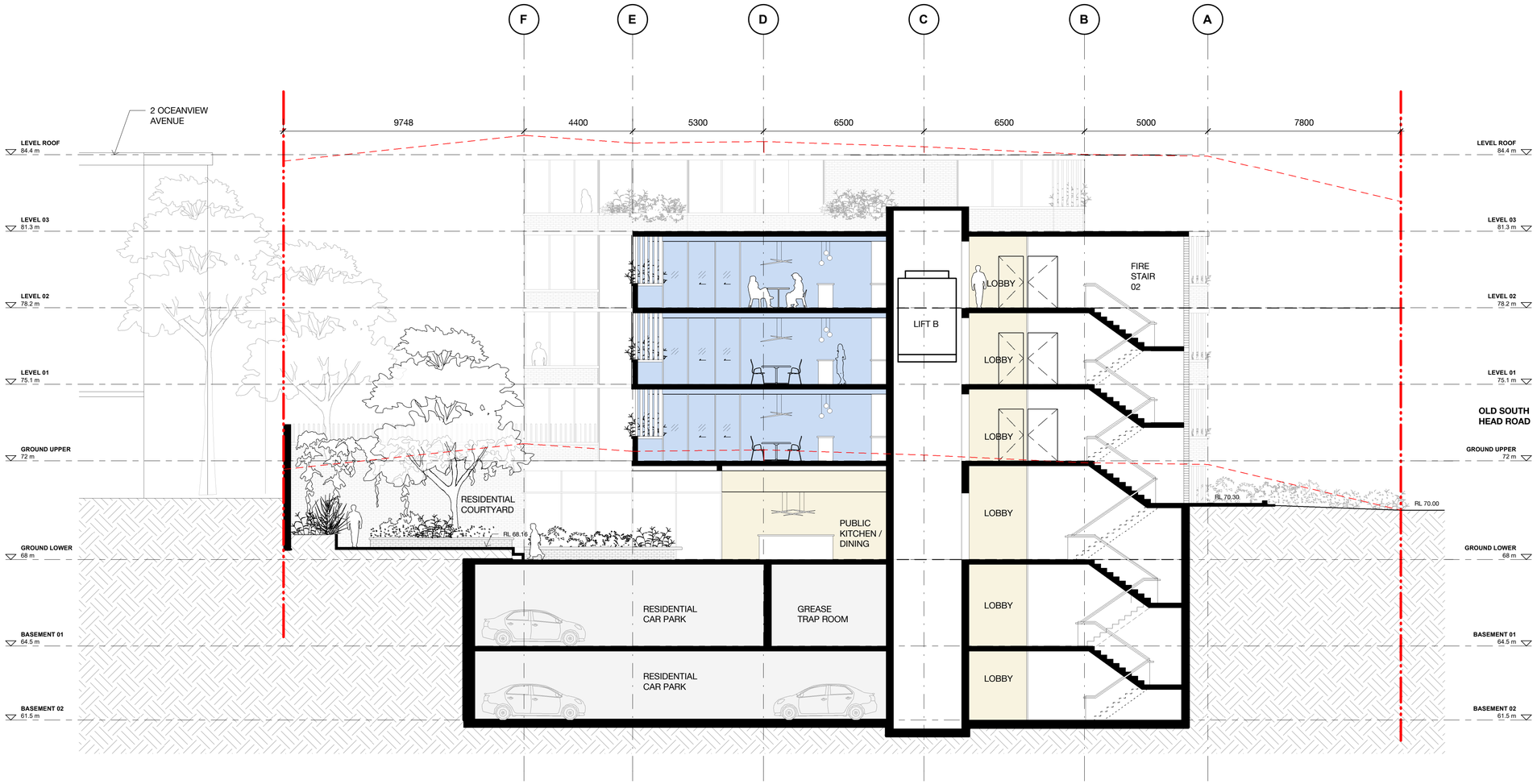
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt



1 SECTION 06 _ FS02

1 : 100

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.10.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A10
BUILDING SECTION

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	Author
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:35:39 AM
BIM	
Drawing no.	A10.005
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

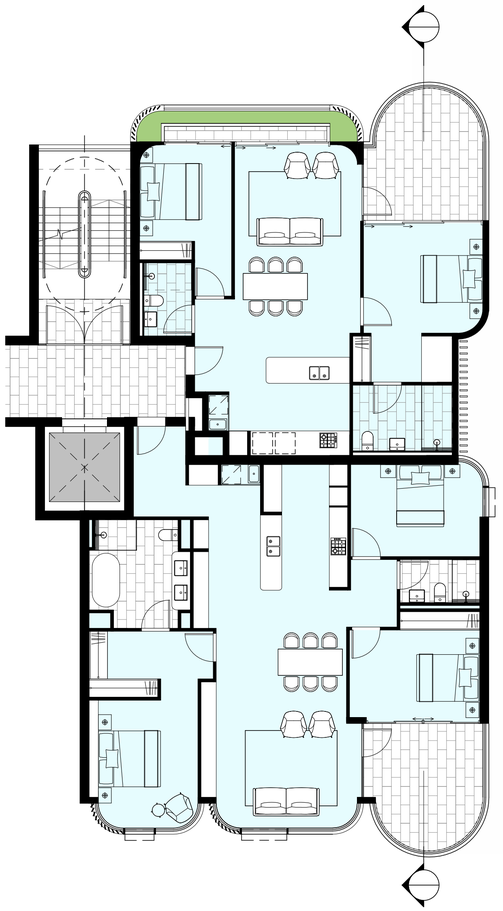
BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

Legend

1. BRICK
2. CONCRETE SLAB
3. TERRACOTTA SCREEN
4. GLASS BRICKS
5. GLASS – FIXED, AWNING WINDOWS AND SLIDING DOORS
6. METAL 01 - GLAZING FRAMES
7. METAL 02 - BALUSTRADE HANDRAILS
8. LANDSCAPE PLANTING

EXTERIOR PERSPECTIVE



KEY PLAN

SECTIONAL AXO OF FACADE TYPE 01

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A11
FACADE TYPE 01

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	Author
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:35:46 AM
BIM	
Drawing no.	A11.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

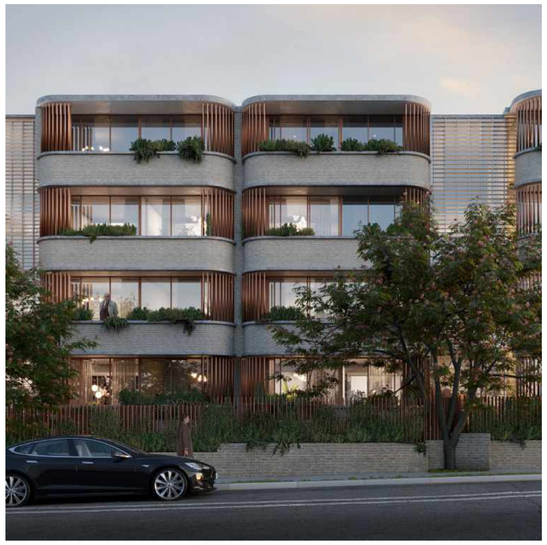
Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

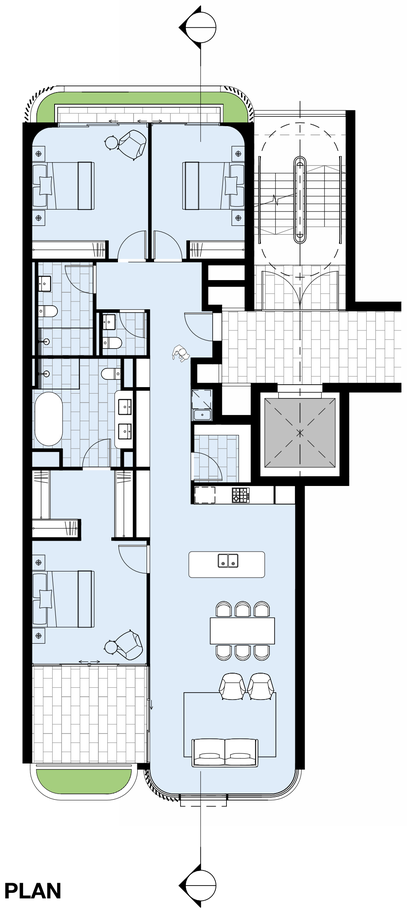
BATESSMART

Legend

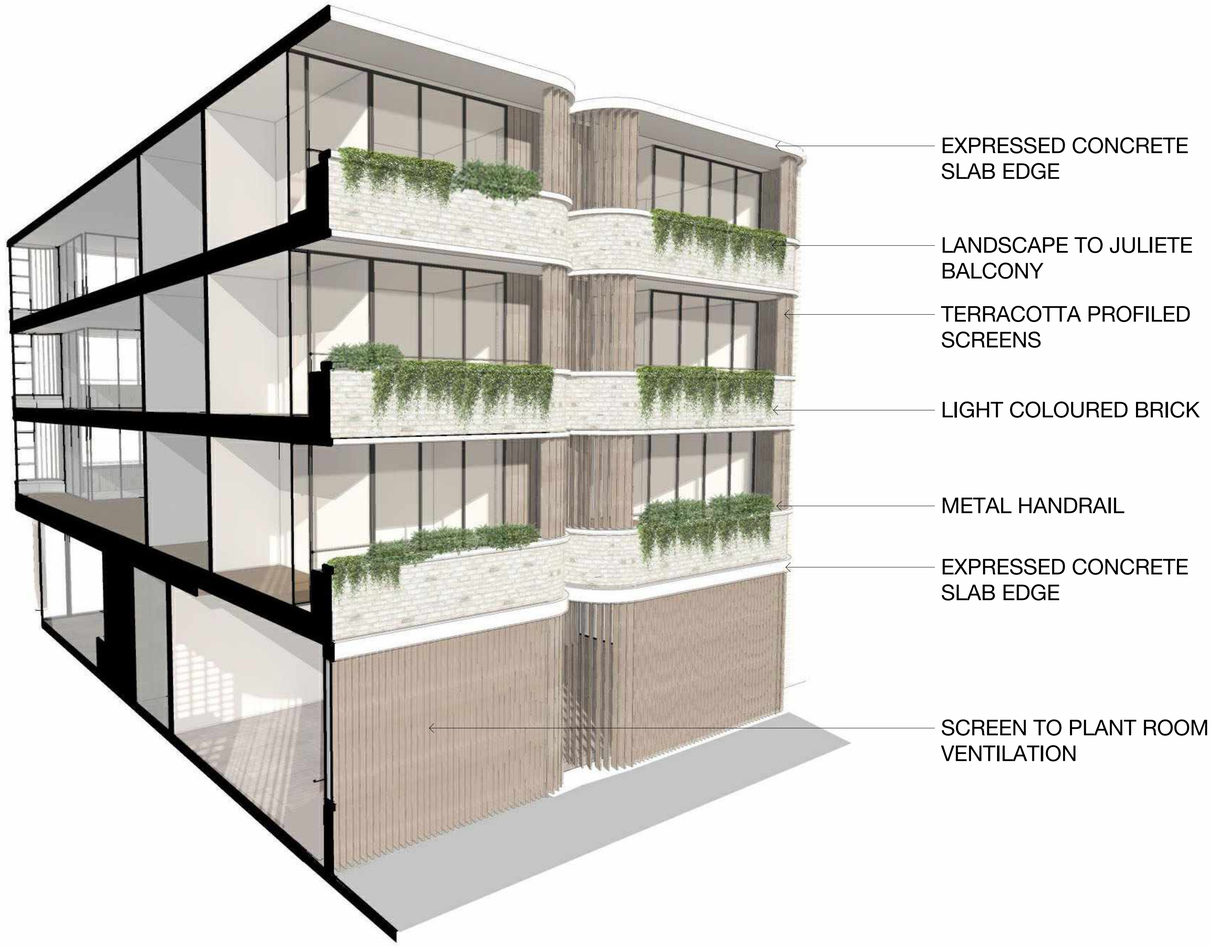
1. BRICK
2. CONCRETE SLAB
3. TERRACOTTA SCREEN
4. GLASS BRICKS
5. GLASS – FIXED, AWNING WINDOWS AND SLIDING DOORS
6. METAL 01 - GLAZING FRAMES
7. METAL 02 - BALUSTRADE HANDRAILS
8. LANDSCAPE PLANTING



EXTERIOR PERSPECTIVE



KEY PLAN



SECTIONAL AXO OF FACADE TYPE 02

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A11
FACADE TYPE 02

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:35:59 AM
BIM	
Drawing no.	A11.002
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

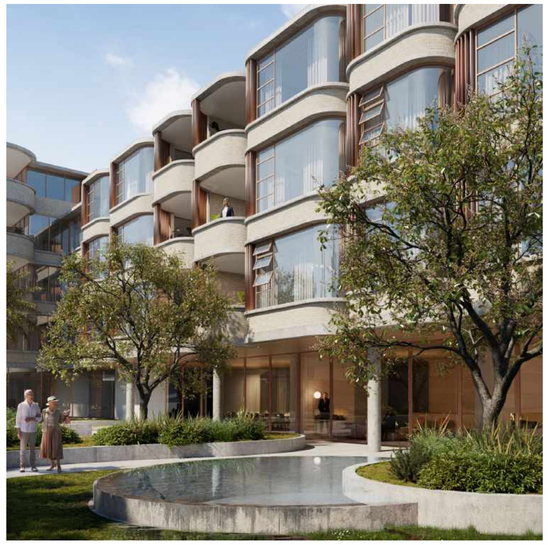
Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

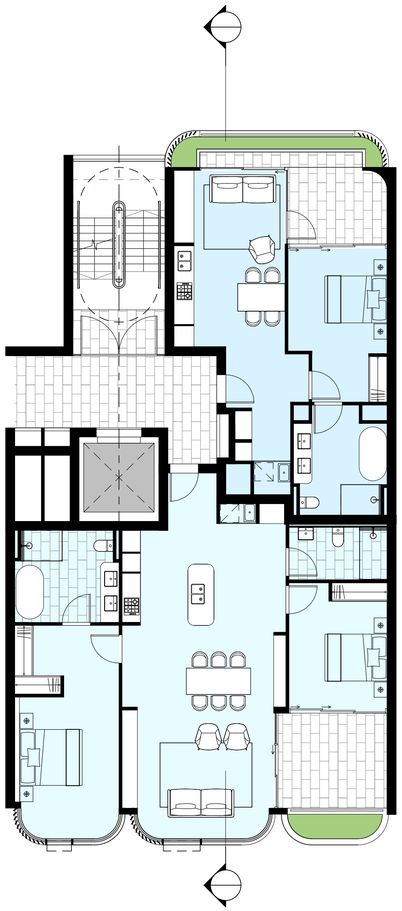
BATESSMART

Legend

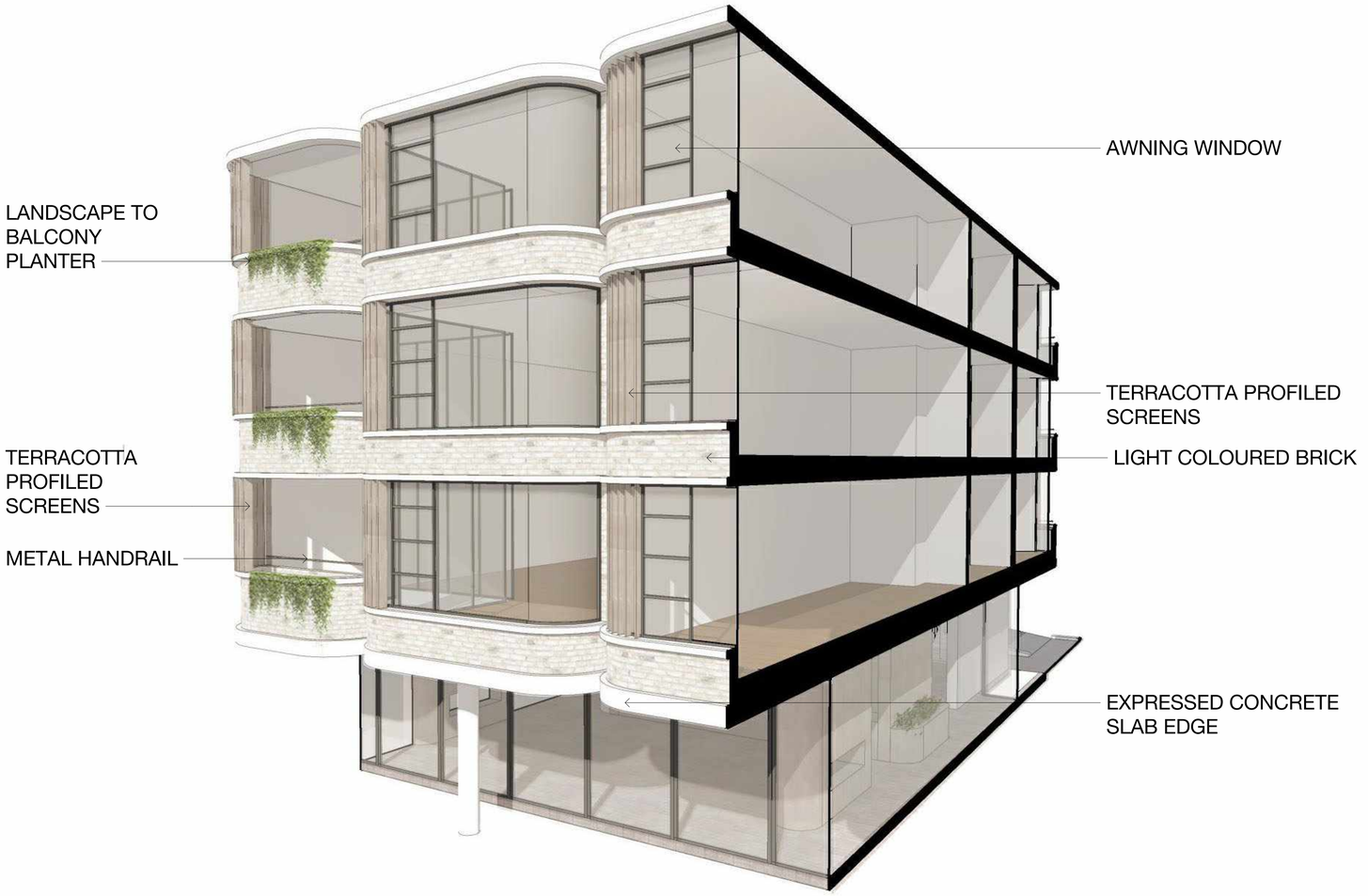
1. BRICK
2. CONCRETE SLAB
3. TERRACOTTA SCREEN
4. GLASS BRICKS
5. GLASS – FIXED, AWNING WINDOWS AND SLIDING DOORS
6. METAL 01 - GLAZING FRAMES
7. METAL 02 - BALUSTRADE HANDRAILS
8. LANDSCAPE PLANTING



EXTERIOR PERSPECTIVE



KEY PLAN



SECTIONAL AXO OF FACADE TYPE 03

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A11
FACADE TYPE 03

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:36:12 AM
BIM	
Drawing no.	A11.003
Revision	A

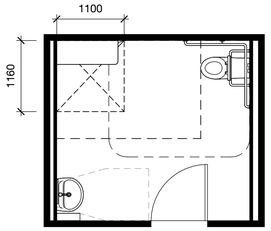
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

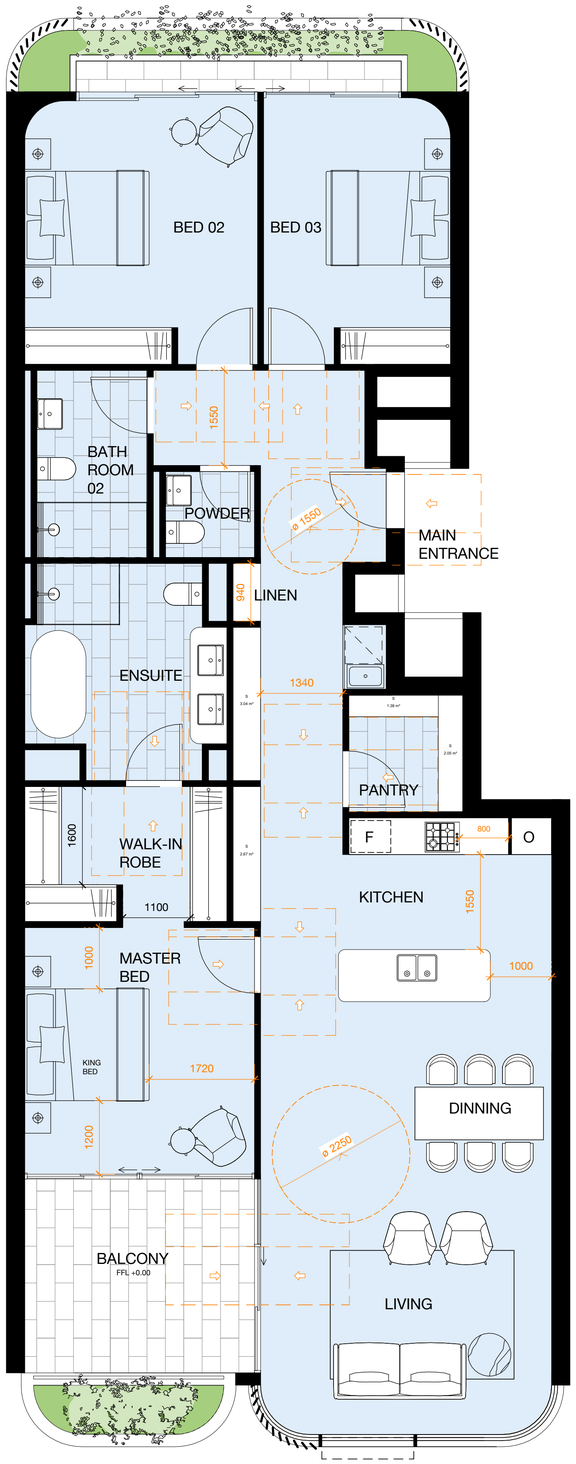
Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



ALTERNATE ACCESSIBLE ENSUITE



1 APT TYPE 01_3B-A

1 : 50

INTERNAL AREA
145 SQM

BALCONY
12 SQM

2 APT TYPE 02_3B-B

1 : 50

INTERNAL AREA
136 SQM

BALCONY
14 SQM

ALTERNATE ACCESSIBLE ENSUITE

Legend

AS 1428 & AS 4299 CIRCULATION & DISTANCE REQUIREMENTS

GENERAL NOTES

- CEILING FAN TO ALL LIVING ROOMS AND BEDROOMS

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.06	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A13
APARTMENT TYPE - 3B

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:36:30 AM		
BIM			
Drawing no.	A13.001	Revision	A

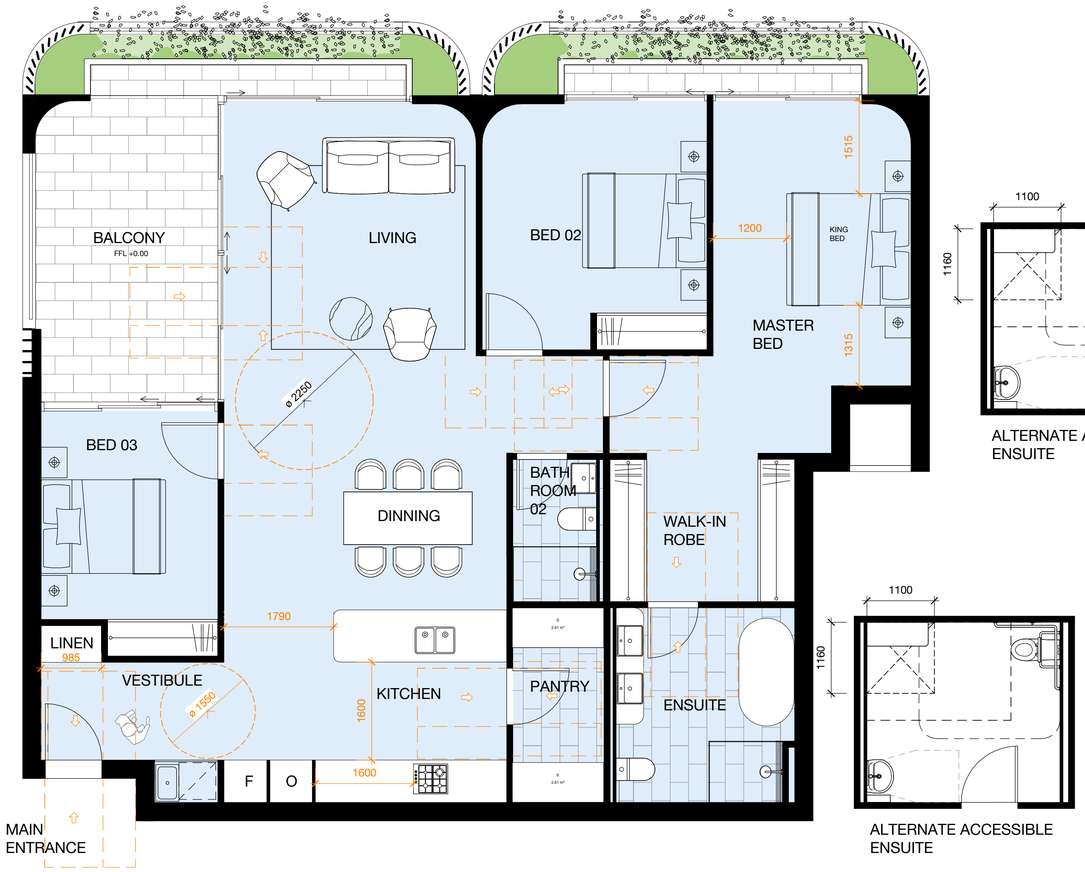
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

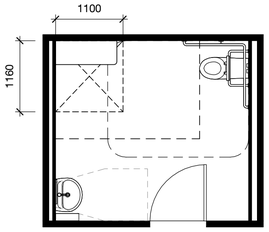
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART





ALTERNATE ACCESSIBLE ENSUITE

ALTERNATE ACCESSIBLE ENSUITE

1 APT TYPE 03_3B-C
1 : 50

INTERNAL AREA
135 SQM

BALCONY
15 SQM

2 APT TYPE 04_3B-D
1 : 50

INTERNAL AREA
142 SQM

BALCONY
15 SQM

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

Legend

AS 1428 & AS 4299 CIRCULATION & DISTANCE REQUIREMENTS

GENERAL NOTES

- CEILING FAN TO ALL LIVING ROOMS AND BEDROOMS

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.06	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A13
APARTMENT TYPE - 3B

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:42:57 AM		
BIM			
Drawing no.	A13.002	Revision	A

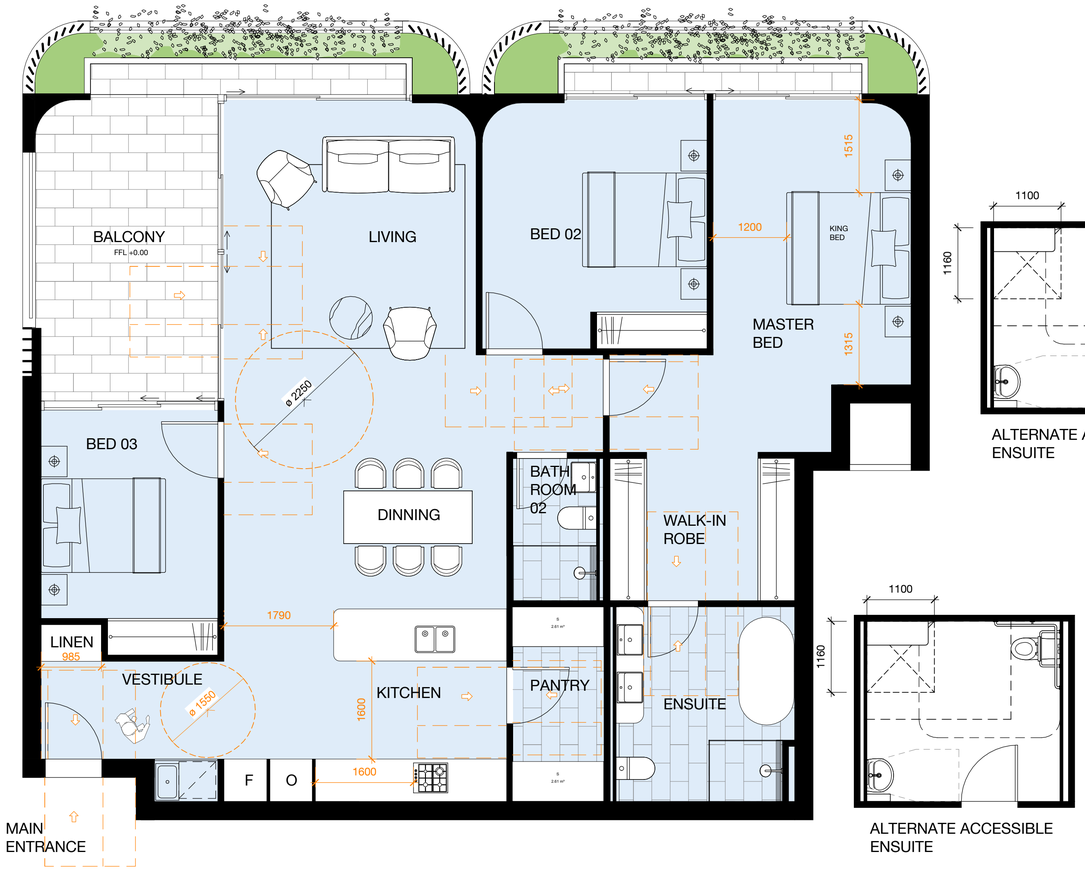
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

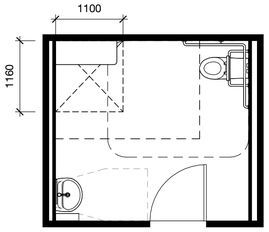
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART





ALTERNATE ACCESSIBLE ENSUITE

ALTERNATE ACCESSIBLE ENSUITE

1 APT TYPE 03_3B-C
1 : 50

INTERNAL AREA
135 SQM

BALCONY
15 SQM

2 APT TYPE 04_3B-D
1 : 50

INTERNAL AREA
142 SQM

BALCONY
15 SQM

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.06	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A13
APARTMENT TYPE -3B

Status	CONCEPT
Scale	1 : 50 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	7/10/2021 3:30:27 PM
BIM	
Drawing no.	A13.002
Revision	A

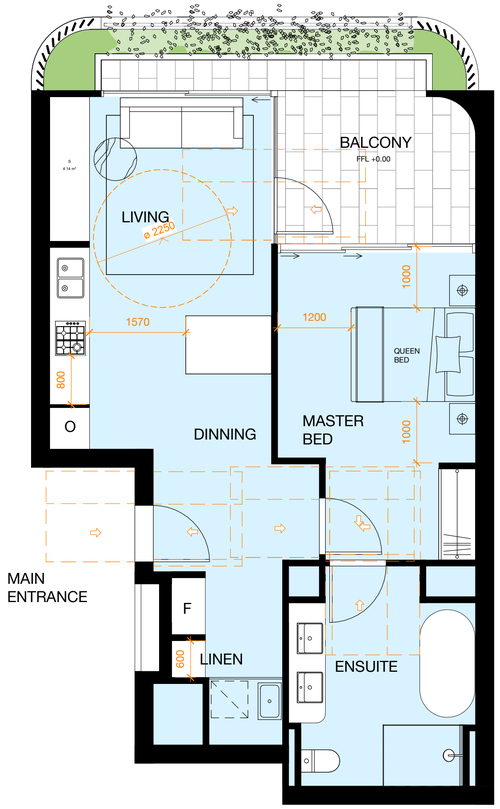
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

PRELIMINARY

BATESSMART™

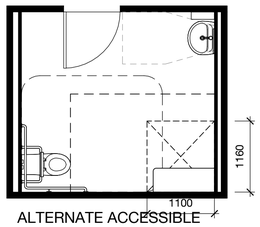


2 APT TYPE 08_1B-A

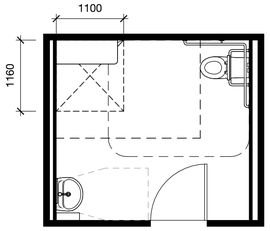
1 : 50

INTERNAL AREA
58 SQM

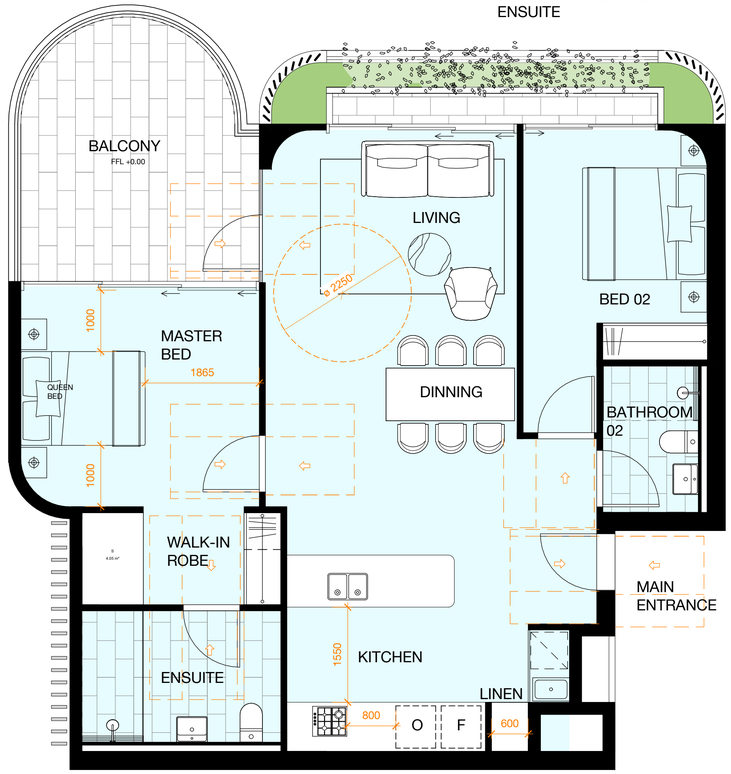
BALCONY
8 SQM



ALTERNATE ACCESSIBLE ENSUITE



ALTERNATE ACCESSIBLE ENSUITE

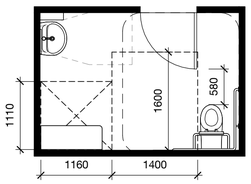


7 APT TYPE 06_2B-A

1 : 50

INTERNAL AREA
91 SQM

BALCONY
15 SQM



ALTERNATE ACCESSIBLE ENSUITE

3 APT TYPE 07_2B-B

1 : 50

INTERNAL AREA
112 SQM

BALCONY
11 SQM

Legend

AS 1428 & AS 4299 CIRCULATION & DISTANCE REQUIREMENTS

GENERAL NOTES

- CEILING FAN TO ALL LIVING ROOMS AND BEDROOMS

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
4	21.10.01	ISSUE FOR INFORMATION	SH	
3	21.09.23	ISSUE FOR INFORMATION	SH	
2	21.09.09	ISSUE FOR INFORMATION	SH	
1	21.09.06	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A13
APARTMENT TYPE - 2B & 1B

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:36:54 AM		
BIM			
Drawing no.	A13.003	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

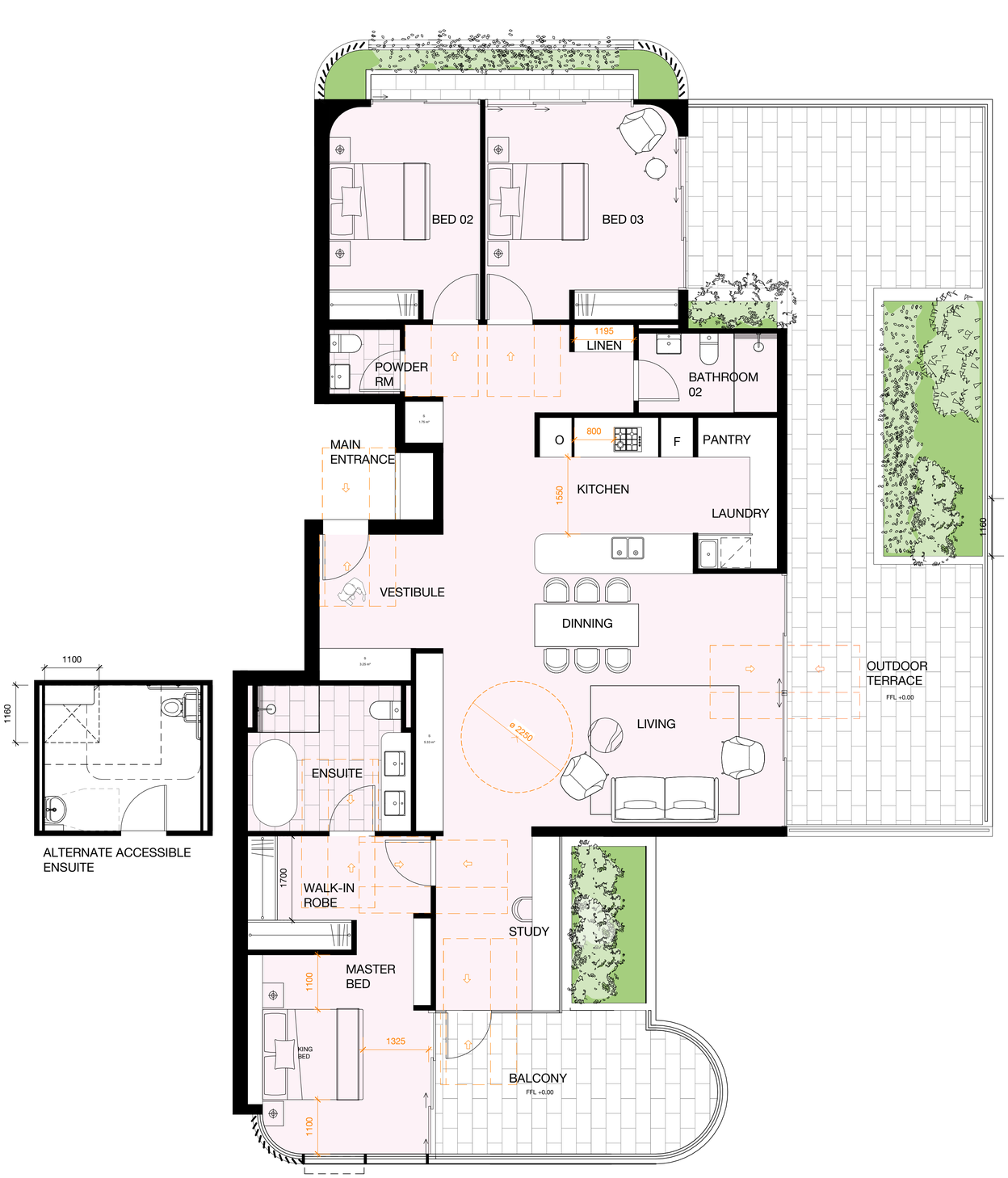
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

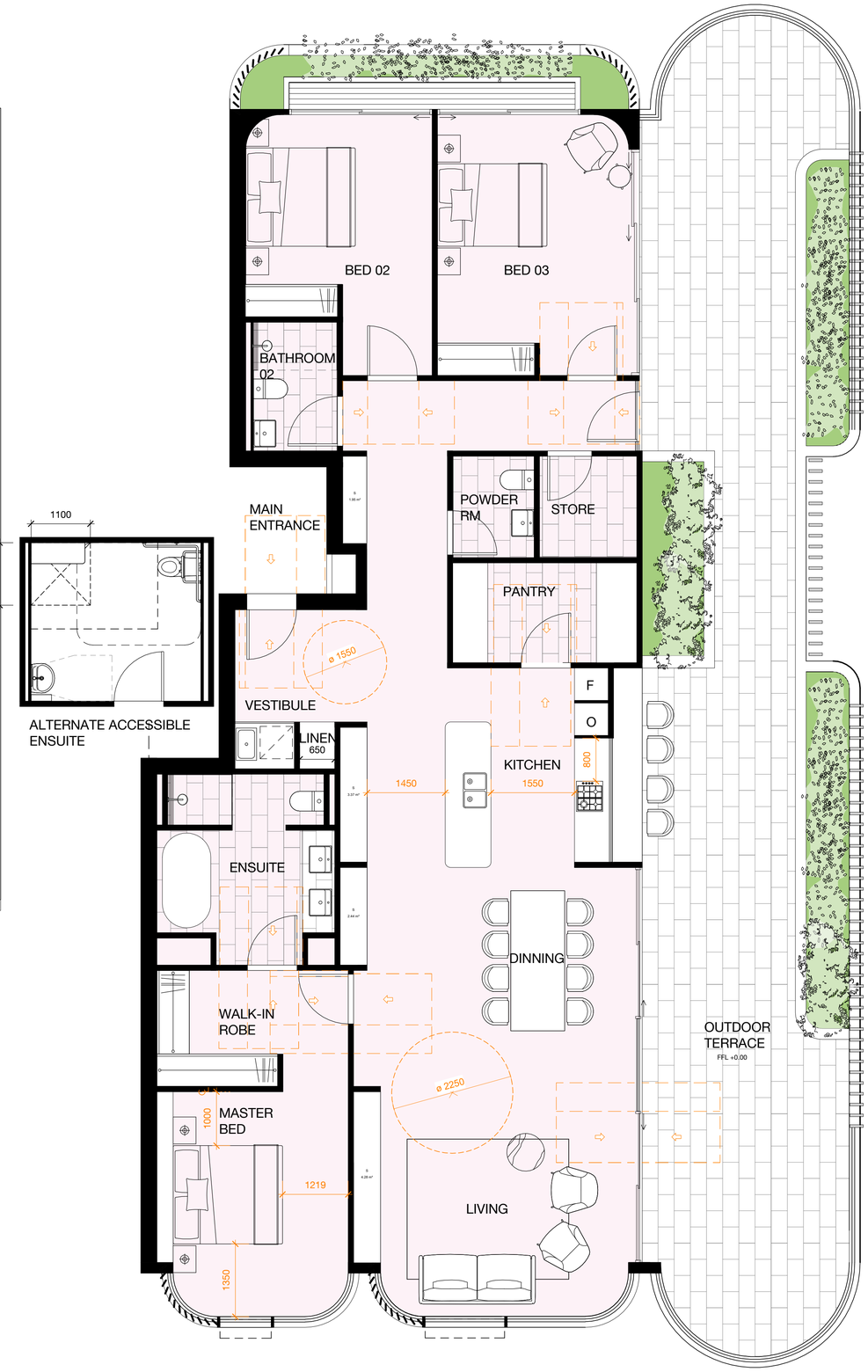


1 APT TYPE 09_3B-E

1 : 50

INTERNAL AREA
158 SQM

BALCONY
67 SQM



2 APT TYPE 10_3B-F

1 : 50

INTERNAL AREA
170 SQM

BALCONY
70 SQM

Legend

AS 1428 & AS 4299 CIRCULATION & DISTANCE REQUIREMENTS

GENERAL NOTES

- CEILING FAN TO ALL LIVING ROOMS AND BEDROOMS

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
3	21.10.01	ISSUE FOR INFORMATION	SH	
2	21.09.23	ISSUE FOR INFORMATION	SH	
1	21.09.09	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A13
APARTMENT TYPE - 3B
PENTHOUSE

Status	CONCEPT		
Scale	As indicated	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:37:09 AM		
BIM			
Drawing no.	A13.004	Revision	A

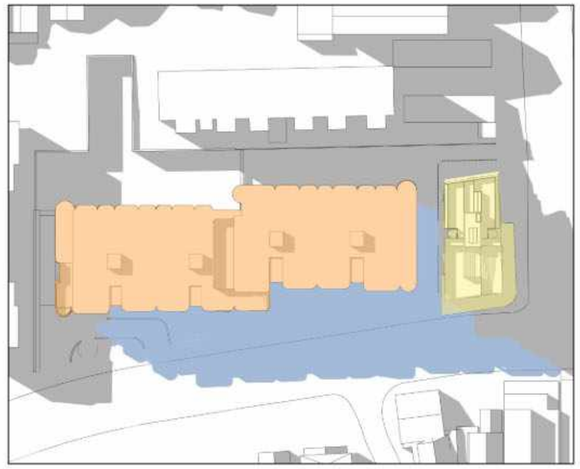
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



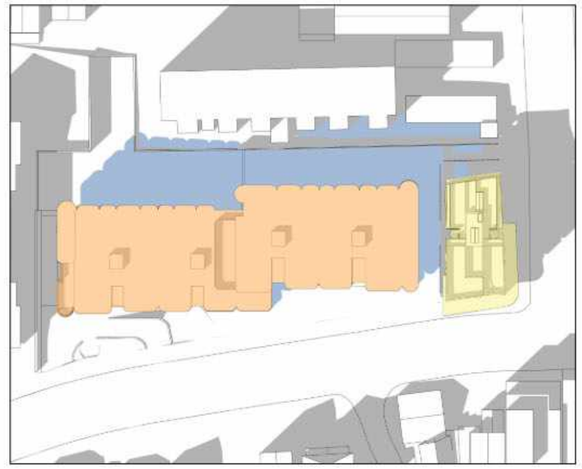
9 AM

10 AM

11 AM

12 PM

1 PM



2 PM

3 PM

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

Legend

- PROPOSED DEVELOPMENT AT 671-683 OLD SOUTH HEAD ROAD VAUCLUSE
- SHADOW CAST BY PROPOSED DEVELOPMENT AT WINTER SOLSTICE JUNE 21ST
- APPROVED NEIGHBOURING DA

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.10.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A21
SHADOW DIAGRAMS - PLAN

Status	CONCEPT
Scale	1 : 100 @ A1
Drawn	Author
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:37:18 AM
BIM	
Drawing no.	A21.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

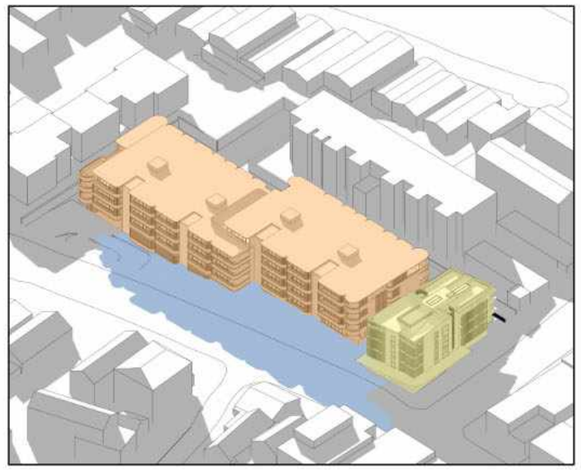
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

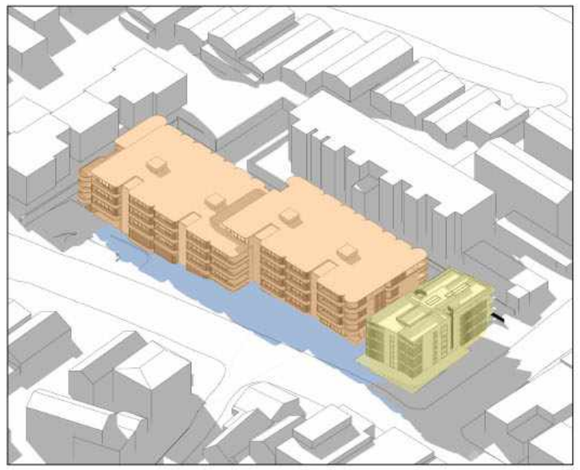
DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt



9 AM



10 AM

11 AM

12 PM

1 PM

2 PM

3 PM

Legend

PROPOSED DEVELOPMENT AT
671-683 OLD SOUTH HEAD ROAD
VAUCLUSE

SHADOW CAST BY PROPOSED
DEVELOPMENT AT WINTER SOLSTICE
JUNE 21ST

APPROVED NEIGHBOURING DA

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
1	21.10.01	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A21
SHADOW DIAGRAM -
PERSPECTIVE

Status	CONCEPT		
Scale	1 : 100	@ A1	
Drawn	Author	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:37:24 AM		
BIM			
Drawing no.	A21.002	Revision	A

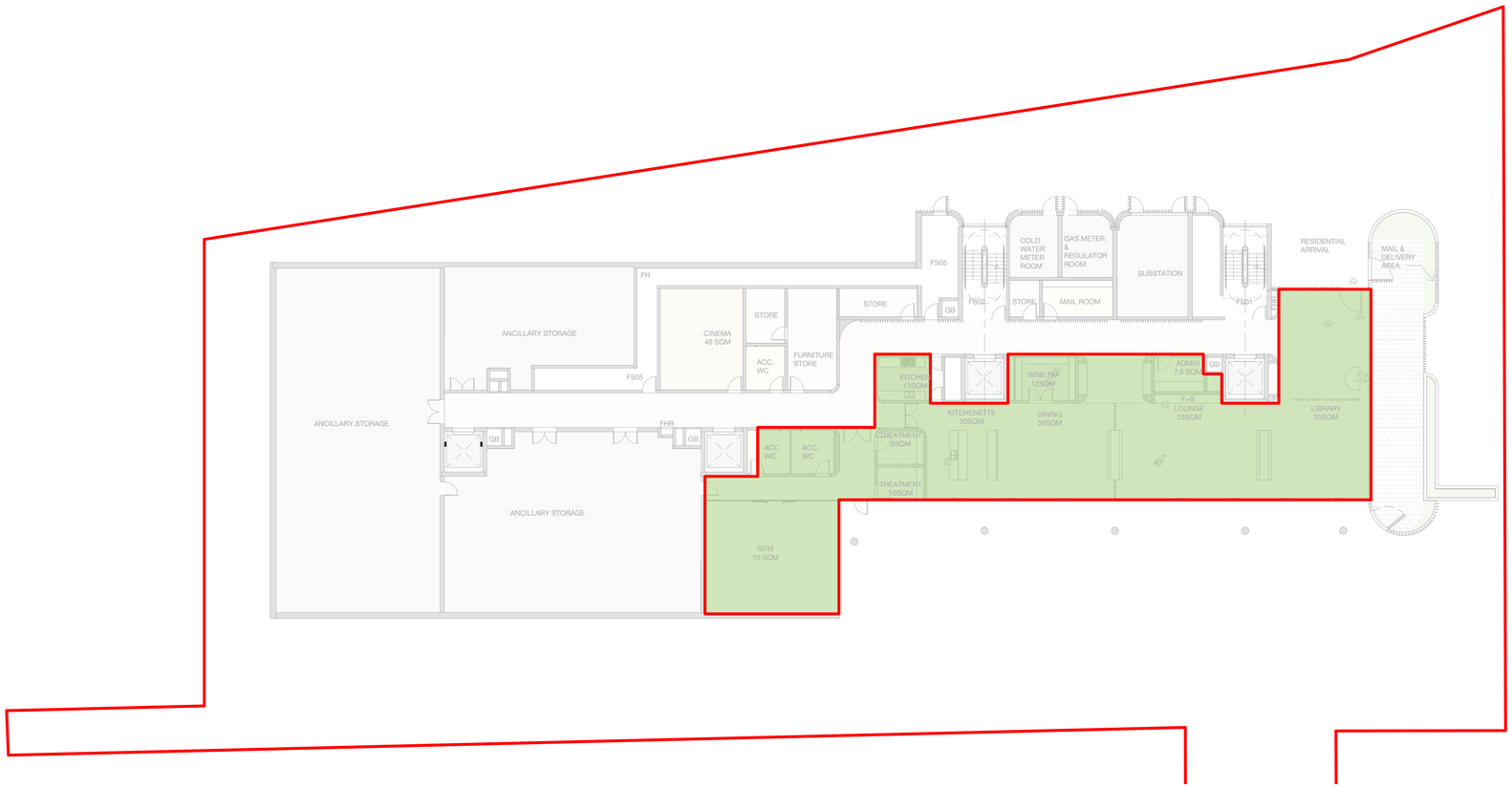
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART



GROUND FLOOR (LOWER)
450 SQM

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
2	21.10.01	ISSUE FOR INFORMATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A22
AREA PLANS

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:37:35 AM
BIM	
Drawing no.	A22.001
Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART™

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

GROUND FLOOR (UPPER)
RESIDENTIAL APARTMENTS
1,353 SQM

LEVEL 01
RESIDENTIAL APARTMENTS
1,353 SQM

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
2	21.10.01	ISSUE FOR INFORMATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A22
AREA PLANS

Status	CONCEPT		
Scale	1 : 200	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:40:15 AM		
BIM			
Drawing no.	A22.002	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

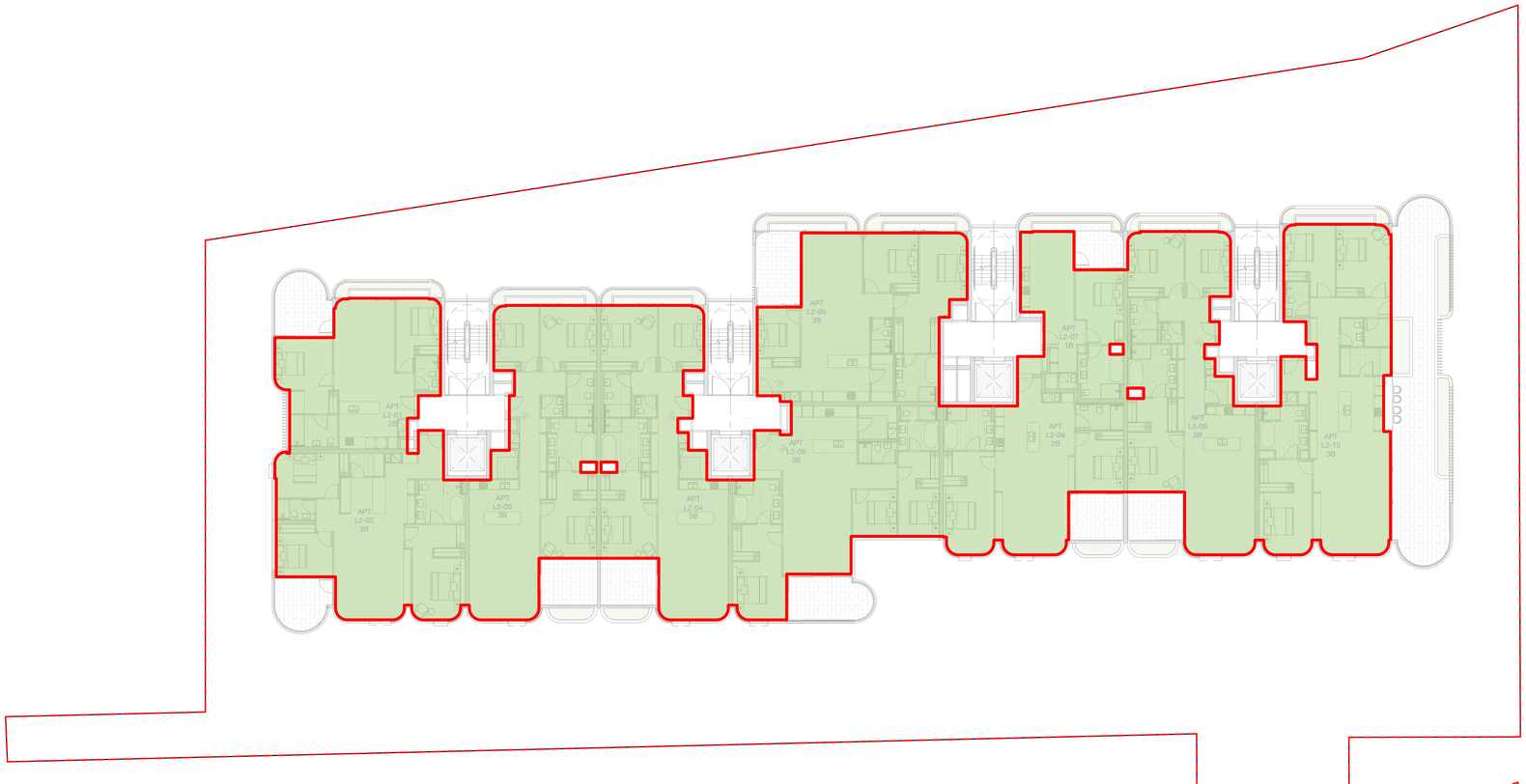
Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

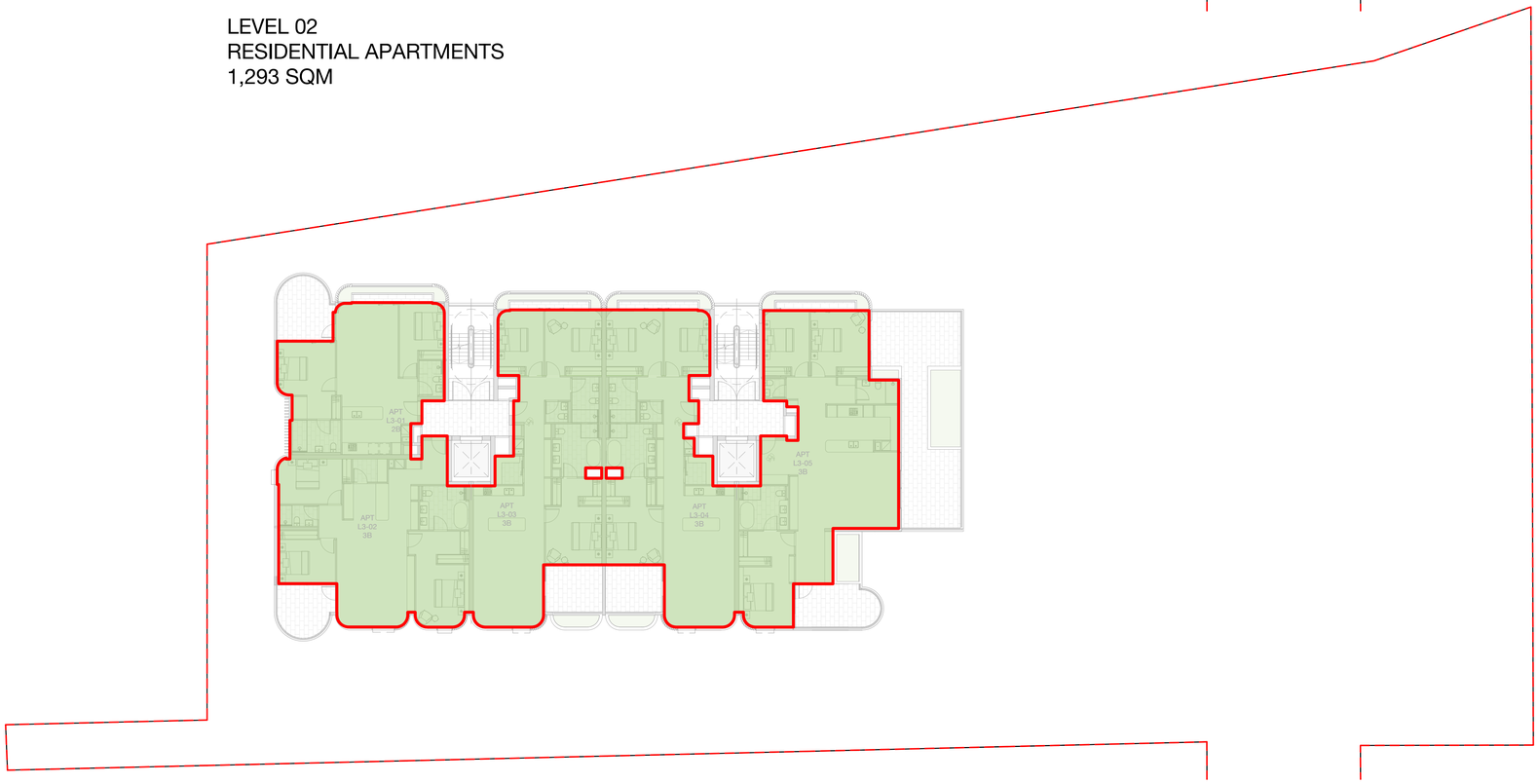
DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt



LEVEL 02
RESIDENTIAL APARTMENTS
1,293 SQM



LEVEL 03
RESIDENTIAL APARTMENTS
673 SQM

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	
2	21.10.01	ISSUE FOR INFORMATION	SH	
1	21.09.23	ISSUE FOR INFORMATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A22
AREA PLANS

Status	CONCEPT
Scale	1 : 200 @ A1
Drawn	SH
Checked	-
Project No.	S12551
Plot Date	8/10/2021 12:40:29 AM
BIM	

Drawing no. A22.003
Revision A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

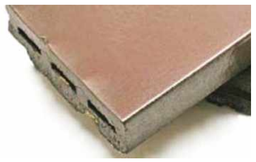
DA ISSUE

BATESSMART

c:\temp\VAUCLUSE_BS_ARCH_R2020_HSS.rvt

1. BRICK
Balcony and walls

2. CONCRETE
Expressed floor slabs

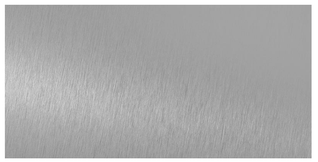


3. TERRACOTTA SCREEN
Screens for privacy, ventilation and shading

4.GLASS BRICKS
Fire Stairs

5. GLASS
Fixed, awning window and sliding doors

5. METAL 01
All frames to glazing



6. METAL 02
Balustrade handrail

7. PLANTING
Landscape to Juliete balcony and courtyard

Rev	Date	Description	Initial	Checked
A	21.10.07	DEVELOPMENT APPLICATION	SH	

OSHR AT VAUCLUSE HOLDINGS PTY LTD

VAUCLUSE SENIORS LIVING
671- 683 OSH RD VAUCLUSE

A41
MATERIAL SCHEDULE

Status	CONCEPT		
Scale	1 : 20	@ A1	
Drawn	SH	Checked	-
Project No.	S12551		
Plot Date	8/10/2021 12:40:41 AM		
BIM			
Drawing no.	A41.001	Revision	A

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email mel@batessmart.com.au
http://www.batessmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email syd@batessmart.com.au
http://www.batessmart.com.au

Bates Smart Architects Pty Ltd ABN 68 094 740 986

DA ISSUE

BATESSMART

APPENDIX B

BOREHOLE LOGS INCLUDING SPT AND DCP TEST DATA (9 SHEETS)

Borehole Log Report

Geo Environmental Engineering Pty Ltd
82 Bridge Street
Lane Cove NSW 2066
T 02 9420 3361

Hole ID. **BH201**
Hole Depth: **2.20 m**
Sheet: **1 of 1**

Project Name: **Geotechnical Investigation** Project Number: **G21071VAU**
Location / Site: **671-683 Old South Head Road, Vaucluse NSW** Client: **Blare Management**

Drilling Company: **FICO Group** Date Started: **19-AUG-21** Ground Level: **RL66.1m** (approx)
Drill Method: **SFA** Date Completed: **19-AUG-21** Latitude: **----------**
Equipment: **Ute Mounted** Longitude: **----------**

Method	Water Level	Depth (m)	RL (m)	Graphic Log	USCS Symbol	Material Type	Material Description	Consistency / Density	Moisture	Samples / Tests ID No.	Samples / Tests SPT	Observations / Comments
							Surface: Grass					
Solid Flight Auger	1.9m seepage 19-Aug-21	0.0	66.0		SP	Natural	**TOPSOIL**- Sand, dark brown, fine to medium grained, trace silt and roots.	loose	m			
							SAND- grey-brown, fine to medium grained.	loose	m			
		1.0	65.0		SP					BH201 1.0-1.45m	2 6 9 N=15	
					SP		**SAND**- orange-brown and brown, fine to medium grained, with trace silt and partially indurated nodules.	medium dense	m			
					SP		**SAND**- dark brown and brown, fine to coarse grained.	medium dense	m	BH201 1.6-1.8m		
		2.0	64.0			Bedrock	**SANDSTONE**- grey and orange, fine to coarse grained, likely highly weathered and estimated to be low to medium strength.		wet			seepage water noted
							Refusal at 2.20m					
		3.0	63.0									
		4.0	62.0									
		5.0										

Moisture

D	Dry
Dp	Damp
SM	Slightly Moist
M	Moist
VM	Very Moist
W	Wet
Sd	Saturated

Additional Comments

Logged By: **Stephen McCormack** Date: **19-Aug-21**
Checked By: **Stephen McCormack** Date: **05-SEP-21**

GEE DAVIES BH LOG G21071VAU.GPJ GEE.GDT 5-9-21 2:20:31 PM

Borehole Log Report

Geo Environmental Engineering Pty Ltd
82 Bridge Street
Lane Cove NSW 2066
T 02 9420 3361

Hole ID. **BH202**
Hole Depth: **3.95 m**
Sheet: **1 of 1**

Project Name: **Geotechnical Investigation**
Project Number: **G21071VAU**
Location / Site: **671-683 Old South Head Road, Vaucluse NSW**
Client: **Blare Management**

Drilling Company: **Geo Environmental Engineering**
Date Started: **19-AUG-21**
Ground Level: **RL66.05m** (approx)
Drill Method: **Hand Auger**
Date Completed: **19-AUG-21**
Latitude: ----------
Equipment: **Manual**
Longitude: ----------

Method	Water Level	Depth (m)	RL (m)	Graphic Log	USCS Symbol	Material Type	Material Description	Consistency / Density	Moisture	Samples / Tests ID No.	DCP blows/100mm (5 10 15)	Observations / Comments
							Surface: Grass					
Hand Auger		0.0	66.0		SP	Natural	**TOPSOIL**- Sand, dark brown and grey, fine to medium grained, with trace roots and silt.	very loose to loose	m			
							SAND- mid-grey, fine to medium grained. becoming pale grey from 0.7m.	loose	m	BH202 1.2-1.5m		
		1.0	65.0		SP							
		2.0	64.0		SP		**SAND**- dark brown/brown, fine to medium grained, trace silt and some indurated nodules.	medium dense to dense	m	BH202 2.3-2.5m		
		3.0	63.0		SP		**SAND**- orange-brown, fine to coarse grained.	medium dense to dense	m	BH202 3.3-3.5m		
	3.8m Seepage 19-Aug-21	4.0	62.0				**Refusal at 3.95m** **Caused by sandstone bedrock**	dense	wet			Seepage noted; DCP bouncing refusal at 4.1m depth
		5.0										

Moisture

D	Dry
Dp	Damp
SM	Slightly Moist
M	Moist
VM	Very Moist
W	Wet
Sd	Saturated

Additional Comments

Logged By: **Stephen McCormack** Date: **19-Aug-21**
Checked By: **Stephen McCormack** Date: **05-SEP-21**

GEE DAVIES BH LOG G21071VAU.GPJ GEE.GDT 5-9-21 2:20:31 PM

Geo Environmental Engineering
82 Bridge Street
Lane Cove NSW 2066
E info@geoenvironmental.com.au

Log Report Legen

MATERIAL SYMBOL


FILL


CONCRETE


ASPHALT


TOPSOIL


ORGANICS


ESTUARINE MUD


CLAY


SAND


SILT


GRAVEL


Sandy CLAY


Clayey SAND


Clayey SILT


Clayey GRAVEL


Silty CLAY


Silty SAND


Sandy SILT


Sandy GRAVEL


Gravelly CLAY


Gravelly SAND


Gravelly SILT


Silty GRAVEL


CLAY & SAND


SAND & CLAY


SILT & CLAY


GRAVEL & CLAY


CLAY & SILT


SAND & SILT


SILT & SAND


GRAVEL & SAND


CLAY & GRAVEL


SAND & GRAVEL


SILT & GRAVEL


GRAVEL & SILT


Sandy Silty CLAY


Clayey Silty SAND


Sandy Clayey SILT


Sandy Clayey GRAVEL


Silty Sandy CLAY


Silty Clayey SAND


Clayey Sandy SILT


Clayey Sandy GRAVEL


Sandy Gravelly CLAY


Clayey Gravelly SAND


Sandy Gravelly SILT


Silty Clayey GRAVEL


Silty Gravelly CLAY


Silty Gravelly SAND


Clayey Gravelly SILT


Clayey Silty GRAVEL


Gravelly Silty CLAY


Gravelly Silty SAND


Gravelly Clayey SILT


Sandy Silty GRAVEL


Gravelly Sandy CLAY


Gravelly Clayey SAND


Gravelly Sandy SILT


Silty Sandy GRAVEL


SANDSTONE


SHALE


GRANITE


BASALT


SHALE / SANDSTONE


PORCELLANITE


GNEISS


SHALE / CLAYSTONE


MUDSTONE


CLAYSTONE


MUDSTONE / CLAYSTONE


SHALE / SILTSTONE


IRONSTONE

ATER LEVELS


Encountered Water

Standing Water

ABBREVIATIONS

PT	Pushtube
SFA	Solid Flight Auger
PWS	Percussion Window Sampler
HA	Hand Auger
HFA	Hollow Flight Auger

ELL RAPHICS


Cuttings


Bentonite


Screen


Gravel Pack


Grout


Cave-in

GEE LEGEND * * 29/10/09 5:04:07 PM

BOREHOLE REPORT

CLIENT: OSHR AT VAUCLUSE HOLDING PTY LTY

DATE: 28/06/2018

BORE No.: 1

PROJECT: 4 LEVEL RESIDENTIAL DEVELOPMENT

PROJECT No.: 2018-106

SHEET: 1 of 1

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE

SURFACE LEVEL: RL å 71.80m

Depth (m)	Description of Strata PRIMARY SOIL - strength/density, colour, grainsize/plasticity, moisture, soil type incl. secondary constituents, other remarks	Sampling		In Situ Testing		
		Type	Depth (m)	Type	Results	
0.00						
	TOPSOIL: Dark brown					
0.20						
	FILL: Brown, fine to medium grained, sand fill					
0.70						
	SAND (SP): Loose, pale grey, fine to medium grained, moist sand (Superficial Soil)					
1.00						
1.80	* became medium dense below 1.80m depth					
2.00						
2.60						
	Gravelly SAND (SW): Medium dense, brown, medium grained, sand, medium to course ground sub-rounded to rounded gravel, moist (Superficial Soil)	D	2.63-2.80			
2.80						
	Sandy CLAY (CL): Firm, orange, low plasticity, moist sandy clay (Residual Soil)	D	2.80-2.88			
3.00						
	* became very stiff to hard below 3.00m depth					
		D	3.30-3.40			
3.60						
	Sandstone (EW) Extremely low strength, orange brown, fine grained (Hawksbury Sandstone)					
3.80						
	HAND AUGER REFUSUAL @3.80m depth in interpreted hard sandy clay to extremely low strength sandstone					
4.00						

RIG: None

DRILLER: CL

LOGGED: JY

METHOD: Hand Auger

GROUND WATER OBSERVATIONS: no free ground water found

REMARKS:

CHECKED:

BOREHOLE REPORT

CLIENT: OSHR AT VAUCLUSE HOLDING PTY LTY

DATE: 28/06/2018

BORE No.: 2

PROJECT: 4 LEVEL RESIDENTIAL DEVELOPMENT

PROJECT No.: 2018-106

SHEET: 1 of 1

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE

SURFACE LEVEL: RL å 73.30m

Depth (m)	Description of Strata	Sampling		In Situ Testing		
	PRIMARY SOIL - strength/density, colour, grainsize/plasticity, moisture, soil type incl. secondary constituents, other remarks	Type	Depth (m)	Type	Results	
0.00						
0.20	TOPSOIL: Dark brown					
0.70	FILL: Brown, fine to medium grained, sand fill					
1.00	SAND (SP): Loose, pale grey, fine to medium grained, moist sand (Superficial Soil)					
1.35	* became medium dense, orange brown and iron cemented between 1.35m to 1.75m depth					
1.75	* became orange yellow below 1.75m depth					
2.00						
2.85	* became dense below 2.85m depth					
3.00						
3.60	* became very dense below 3.60m depth					
4.00						
5.00						
5.20	HAND AUGER DISCONTINUED @5.20m depth					

RIG: None

DRILLER: CL

LOGGED: JY

METHOD: Hand Auger

GROUND WATER OBSERVATIONS: no free ground water found

REMARKS:

CHECKED:

BOREHOLE REPORT

CLIENT: OSHR AT VAUCLUSE HOLDING PTY LTY

DATE: 28/06/2018

BORE No.: 3

PROJECT: 4 LEVEL RESIDENTIAL DEVELOPMENT

PROJECT No.: 2018-106

SHEET: 1 of 1

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE

SURFACE LEVEL: RL å 73.00m

Depth (m)	Description of Strata PRIMARY SOIL - strength/density, colour, grainsize/plasticity, moisture, soil type incl. secondary constituents, other remarks	Sampling		In Situ Testing		
		Type	Depth (m)	Type	Results	
0.00						
	TOPSOIL: Dark brown					
0.20						
	FILL: Brown, fine to medium grained, sand fill					
0.45						
	SAND (SP) : Very loose to loose, pale grey, fine to medium grained, moist sand (Superficial Soil)					
1.00	* became medium dense, brown orange and iron cemented below 1.00m depth					
1.20						
	HAND AUGER DISCONTINUED @1.20m depth in medium dense sand					
2.00						
3.00						
4.00						
5.00						

RIG: None

DRILLER: CL

LOGGED: JY

METHOD: Hand Auger

GROUND WATER OBSERVATIONS: no free ground water found

REMARKS:

CHECKED:

BOREHOLE REPORT

CLIENT: OSHR AT VAUCLUSE HOLDING PTY LTY

DATE: 28/06/2018

BORE No.: 4

PROJECT: 4 LEVEL RESIDENTIAL DEVELOPMENT

PROJECT No.: 2018-106

SHEET: 1 of 1

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE

SURFACE LEVEL: RL å 71.00m

Depth (m)	Description of Strata	Sampling		In Situ Testing		
	PRIMARY SOIL - strength/density, colour, grainsize/plasticity, moisture, soil type incl. secondary constituents, other remarks	Type	Depth (m)	Type	Results	
0.00						
0.15	TILE overlaying BEDDING SAND					
	FILL: Brown, fine to medium grained, sand fill					
0.95						
1.00	SAND (SP): Loose, pale grey, fine to medium grained, moist sand (Superficial Soil)					
1.40	* became medium dense, red brown and iron cemented below 1.40m					
1.65	* became very dense between 1.65m to 1.95m depth					
1.95	* became medium dense, orange yellow below 1.95m depth					
2.00						
3.00						
4.00	* became dense below 4.05m depth					
5.00						
	HAND AUGER DISCONTINUED @5.00m depth					

RIG: None

DRILLER: CL

LOGGED: JY

METHOD: Hand Auger

GROUND WATER OBSERVATIONS: no free ground water found

REMARKS:

CHECKED:

BOREHOLE REPORT

CLIENT: OSHR AT VAUCLUSE HOLDING PTY LTY

DATE: 28/06/2018

BORE No.: 5

PROJECT: 4 LEVEL RESIDENTIAL DEVELOPMENT

PROJECT No.: 2018-106

SHEET: 1 of 1

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE

SURFACE LEVEL: RL å 71.00m

Depth (m)	Description of Strata PRIMARY SOIL - strength/density, colour, grainsize/plasticity, moisture, soil type incl. secondary constituents, other remarks	Sampling		In Situ Testing		
		Type	Depth (m)	Type	Results	
0.00						
	FILL: Brown, fine to medium grained, sand fill					
0.55	SAND (SP): Very loose, pale grey, fine to medium grained, moist sand (Superficial Soil)					
1.00						
1.20	* became loose below 1.20m depth					
1.75	* became medium dense, red brown and iron cemented below 1.75m depth					
2.00	* became dense to very dense between 1.95m to 2.25m depth					
2.35	* became medium desne and orange yellow below 2.35m depth					
3.00						
3.45	* became dense below 3.45m depth					
3.75	* became very dense below 3.75m depth					
4.00						
5.00						
5.80	HAND AUGER DISCONTINUED @5.80m depth					
6.00						

RIG: None

DRILLER: CL

LOGGED: JY

METHOD: Hand Auger

GROUND WATER OBSERVATIONS: no free ground water found

REMARKS:

CHECKED:

DYNAMIC PENETROMETER TEST RESULTS SHEET

CLIENT: OSHR AT VAUCLUSE HOLDIN **DATE:** 28/06/2018

PROJECT: 4 LEVEL RESIDENTIAL DEVEI **PROJECT No.:** 2018-106

LOCATION: 671-679 OLD SOUTH HEAD ROAD, VAUCLUSE **SHEET: 1 of 1**

	Test Location								
Depth (m)	DCP1	DCP1a	DCP2	DCP2a	DCP3	DCP4	DCP4a	DCP5	DCP5a
0.00 - 0.15	1	--	1	--	2	13	--	--	--
0.15 - 0.30	1	--	2	--	1	2	--	--	--
0.30 - 0.45	1	--	2	--	0	3	--	--	--
0.45 - 0.60	1	--	2	--	0	3	--	1	--
0.60 - 0.75	1	--	2	--	2	2	--	1	--
0.75 - 0.90	2	--	2	--	2	2	--	1	--
0.90 - 1.05	2	--	2	--	4	2	--	1	--
1.05 - 1.20	2	--	2	--	6	2	--	1	--
1.20 - 1.35	2	--	3	--	5	3	--	2	--
1.35 - 1.50	2	--	5	--	3	3	--	2	--
1.50 - 1.65	3	--	4	--	4	3	--	2	--
1.65 - 1.80	3	--	4	--	4	16	--	5	--
1.80 - 1.95	4	--	3	--	5	12	--	6	--
1.95 - 2.10	4	--	4	--	6	7	--	14	--
2.10 - 2.25	5	--	4	--	7	6	--	17	--
2.25 - 2.40	6	--	5	--	8	7	--	9	--
2.40 - 2.55		--		--			--		--
2.55 - 2.70		--		--			--		--
2.70 - 2.85		8		7			5		--
2.85 - 3.00		3		14			5		--
3.00 - 3.15		7		12			4		--
3.15 - 3.30		18		13			3		4
3.30 - 3.45		29		12			4		10
3.45 - 3.60		40		14			3		14
3.60 - 3.75				19			3		14
3.75 - 3.90				19			6		17
3.90 - 4.05				22			9		18
4.05 - 4.20							11		21
4.20 - 4.35									

TEST METHOD: AS 1289. F3.2, CONE PENETROMETER -- DCP2a, 4a
AS 1289. F3.3, PERTH SAND PENETROMETER -- DCP1, 2, 3, 4, 5, 1a, 5a

REMARKS: **(B)** Test hammer bouncing upon refusal on solid object
-- No test undertaken at this level due to prior excavation of soils

APPENDIX C

LABORATORY REPORT (7 SHEETS)

Geo-Environmental Engineering Pty Ltd
82 Bridge St
Lane Cove
NSW 2066

Attention: **ALL INVOICES Stephen McCormack**

Report **818375-S**
Project name VAUCLUSE
Received Date Aug 19, 2021

Client Sample ID			**BH201/1-1.45**	**BH201/1.6-1.8**	**BH202/1.2-1.5**	**BH202/2.3-2.5**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S21-Au36223**	**S21-Au36224**	**S21-Au36225**	**S21-Au36226**
Date Sampled			**Aug 19, 2021**	**Aug 19, 2021**	**Aug 19, 2021**	**Aug 19, 2021**
Test/Reference	LOR	Unit				
Chloride	10	mg/kg	< 10	< 10	< 10	10
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	18	16	16	22
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	7.0	6.9	6.3	6.2
Resistivity*	0.5	ohm.m	540	620	620	450
Sulphate (as SO4)	10	mg/kg	< 10	< 10	< 10	13
% Moisture	1	%	6.9	7.8	1.8	5.4

Client Sample ID			**BH202/3.3-3.5**
Sample Matrix			**Soil**
Eurofins Sample No.			**S21-Au36227**
Date Sampled			**Aug 19, 2021**
Test/Reference	LOR	Unit	
Chloride	10	mg/kg	< 10
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	10
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	6.6
Resistivity*	0.5	ohm.m	970
Sulphate (as SO4)	10	mg/kg	< 10
% Moisture	1	%	6.6

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Chloride	Sydney	Aug 23, 2021	28 Days
- Method: LTM-INO-4090 Chloride by Discrete Analyser			
Conductivity (1:5 aqueous extract at 25°C as rec.)	Sydney	Aug 23, 2021	7 Days
- Method: LTM-INO-4030 Conductivity			
pH (1:5 Aqueous extract at 25°C as rec.)	Sydney	Aug 23, 2021	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Sulphate (as SO4)	Sydney	Aug 23, 2021	28 Days
- Method: E045 Anions by Ion Chromatography			
% Moisture	Sydney	Aug 19, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261 Site # 1254

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
46-48 Banksia Road
Welshpool WA 6106
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name:	Geo-Environmental Engineering P/L	**Order No.:**	
Address:	82 Bridge St Lane Cove NSW 2066	**Report #:**	818375
		Phone:	02 9592 0218
		Fax:	02 9519 9140
Project Name:	VAUCLUSE		

Received:	Aug 19, 2021 3:05 PM
Due:	Aug 26, 2021
Priority:	5 Day
Contact Name:	ALL INVOICES Stephen

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Aggressivity Soil Set	Moisture Set
Melbourne Laboratory - NATA Site # 1254							
Sydney Laboratory - NATA Site # 18217						X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Mayfield Laboratory - NATA Site # 25079							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	BH201/1-1.45	Aug 19, 2021		Soil	S21-Au36223	X	X
2	BH201/1.6-1.8	Aug 19, 2021		Soil	S21-Au36224	X	X
3	BH202/1.2-1.5	Aug 19, 2021		Soil	S21-Au36225	X	X
4	BH202/2.3-2.5	Aug 19, 2021		Soil	S21-Au36226	X	X
5	BH202/3.3-3.5	Aug 19, 2021		Soil	S21-Au36227	X	X
Test Counts						5	5

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank									
Chloride			mg/kg	< 10			10	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)			uS/cm	< 10			10	Pass	
Sulphate (as SO4)			mg/kg	< 10			10	Pass	
LCS - % Recovery									
Chloride			%	103			70-130	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)			%	80			70-130	Pass	
Resistivity*			%	80			70-130	Pass	
Sulphate (as SO4)			%	103			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
				Result 1					
Chloride	S21-Au36225	CP	%	97			70-130	Pass	
Sulphate (as SO4)	S21-Au36225	CP	%	98			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S21-Au35685	NCP	%	11	13	20	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (1:5 aqueous extract at 25°C as rec.)	S21-Au36224	CP	uS/cm	16	13	26	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	S21-Au36224	CP	pH Units	6.9	6.9	<1	30%	Pass	
Resistivity*	S21-Au36224	CP	ohm.m	620	800	26	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chloride	S21-Au36225	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Sulphate (as SO4)	S21-Au36225	CP	mg/kg	< 10	< 10	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised by:

Emma Beesley	Analytical Services Manager
Charl Du Preez	Senior Analyst-Inorganic (NSW)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1 21 Smallwood Place Murarrie QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory** Unit 2 91 Leach Highway Kewdale WA 6105 08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory** 6 Monterey Road Dandenong South VIC 3175 03 8564 5000 EnviroSampleVic@eurofins.com

Company	GEO-ENVIRONMENTAL	Project №	VAUCLUSE	Project Manager	S. McCormack	Sampler(s)	S. McCormack
Address	82 BRIDGE St LANE COVE	Project Name		EDD Format (ESdat, EQuIS etc)		Handed over by	"
Contact Name	S. McCormack					Email for Invoice	
Phone №	0431480 980					Email for Results	
Special Directions							
Purchase Order							
Quote ID №							

Analyses — Where metals are requested, please specify "Total" or "Filtered". SUITE code must be used to attract SUITE pricing.

Containers — Change container type & size if necessary.

Required Turnaround Time (TAT) — Default will be 5 days if not ticked. ♦Surcharge will apply

- ☐ Overnight (reporting by 9am)♦
- ☐ Same day♦ ☐ 1 day♦
- ☐ 2 days♦ ☐ 3 days♦
- ☐ 5 days (Standard)
- ☐ Other( )

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix Solid (S) Water (W)	Aggressivity	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
21	BH201/1-1.45			/	/								
22	BH201/1.6-1.8			/	/								
23	BH202/1.2-1.5			/	/								
24	BH202/2.3-2.5			/	/								
25	BH202/3.3-3.5			/	/								
26													
27													
28													
29													
30													
	Total Counts			5									

Method of Shipment	☐ Courier (#) ☐ ~~Hand Delivered~~ ☐ Postal	Name	S. McCormack	Signature	[signature]	Date	19/8/21	Time	3pm
Laboratory Use Only	Received By	Graeme Thurley	(SYD) | BNE | MEL | PER | ADL | NTL | DRW	Signature	[signature]	Date	19/8	Time	3:05
	Temperature	22.8?							
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time	
	Report №	818375							

Eurofins Environment Testing Australia Pty Ltd

QS3009_R10 Modified by: Dr. R Symons Approved by: G. Jackson Approved on: 8 August 2019