Sent:17/04/2020 3:16:06 PMSubject:Submission for DA2020/0302Attachments:Letter in relation to DA 2020 0302 17042020.pdf; 41Clifford review DA.pdf;<br/>uppercliffordsketchideas.pdf; Quadroparker-n4902.pdf;

Dear Sir / Madam,

Attached is a letter and some supporting documents in relation to DA2020/0302, at 41 Upper Clifford Avenue, Fairlight. Can you please add this to the submissions for the DA.

Please feel free to contact me at this email address (graemerplowman@gmail.com).

Graeme

Graeme Plowman and Jo-ann Plowman 46 Upper Clifford Avenue Fairlight New South Wales 2094

Northern Beaches Council By email

17 April 2020

Dear Sir / Madam,

Thank you for the notification in relation to DA2020/0302, at 41 Upper Clifford Avenue, Fairlight, and the opportunity to respond to this application.

We live at 46 Upper Clifford Avenue (UCA). The proposed DA would cause significant view loss from our house of Middle Harbour, Sydney Harbour and South Head. This would significantly reduce both our enjoyment of living in the property and its market value, given these are iconic views. This is our main objection to the DA.

Prior to outlining our objections to the DA, we also highlight a number of omissions within it. These make it impossible for us to determine with any certainty the actual impact it will have on us.

# 1. Information missing from the DA

We have noted the following missing information and potential non-compliances in the DA (for reference, please see comments on the attached plans):

- Floor Plans: Ground RL's are not shown on any plans.
- Roof Plan DA12: The ridge and parapet heights are not shown. This is a major omission that undermines our ability to establish the finished RL's and their impact on our view.
- Existing Garage / new Unit 1 Garage: there are inaccuracies in the height of the existing garage and inconsistencies in the height of the proposed new garage throughout the plans and view analysis. This is outlined in more detail in section 2 of this letter.
- Elevations and Sections:
  - No RL's or heights are shown at roof ridges, parapets or tops of walls. This makes it impossible to know whether the development complies with existing height restrictions.
  - Very few RL's of the existing ground level are shown. This makes it impossible to confirm whether the height limit is correct.
  - An outline of the existing buildings is not shown this also makes it difficult to check the ground heights shown and resolve existing versus proposed conditions.
  - Section DA23: the excavation does not comply with the 8.5m height limit by 2.5m, as height limit is attached to existing ground levels and not to excavated new ground levels.
- Demolition Plans: these are not shown for the existing plans.

# 2. View loss from our house

Notwithstanding the omissions in the DA highlighted in section 1, we outline in this section the implied impact on our ocean views with the information that does exist within the DA.

# (a) View loss caused by building heights

We note from the Statement of Environmental Effects (section 4.2.1.3) that the applicant acknowledges the need to protect the ocean views from our house and those at 43 UCA. Based on the View Analysis in the Master Set of Plans, the Statement of Environmental Effects also concludes in section 4.2.1.3 that "the design achieves a view sharing outcome by maintaining existing whole views from these properties towards Middle Harbour and its surrounding land / water interface". Unfortunately, this is not correct for the following reasons:

- i. The photo on View Analysis Sheet 01 in the Master Set of Plans is taken from the western edge of our property (and, it appears, from a low height on our terrace). This is misleading and significantly understates the view loss from our house.
- ii. The black outline in this photo implies that the roof of the new garage in Unit 1 will go up to the top of the windows in the garage at 39 UCA, with the roof of the living area in Unit 1 just below this. This would devastate the view from our house, taking over 80% of our ocean views across the Harbour to South Head.
- iii. Even if the new garage is only built to the height of the existing garage at 41 UCA, as implied on page 16 of the Master Set of Plans, this would still take over half of our ocean view to South Head (due to the move to a double garage and the living area of Unit 1).

The photos below demonstrate these three points.



• The current view from the middle of our property (at terrace / living area height)

• View Analysis Sheet 01 from the Master Set of Plans – submitted by the applicant



• View loss from our house implied by 'View Analysis Sheet 01' in the Master Set of Plans

The photo below shows the actual view loss due to a double garage with a roof up to the top of the windows of the garage at 39 UCA, with the entrance hall behind it, and the western half of the living area set back and slightly below this. This is considerably different to the view analysis submitted by the applicant.

The white dotted line represents the normal height of the trees in the middle of UCA, which have not been trimmed for some time. Anything above this line is therefore temporary view loss that would be turned into permanent view loss by the living area of Unit 1.



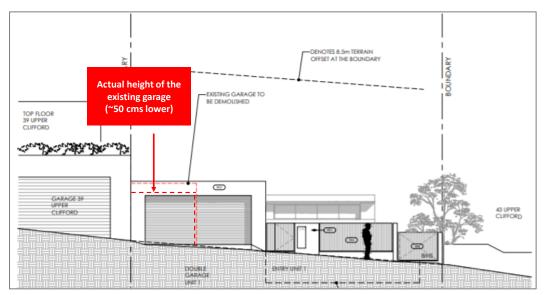
# • View loss from our house implied by page 16 in the Master Set of Plans

This would be the view loss due to a new double garage at the height of the existing garage at 41 UCA, with the entrance hall behind it, and the western half of the living area set back and slightly below this. Even at this lower height, it would still take over half of our ocean view to South Head.



• Further inconsistency on page 17 of the Master Set of Plans – submitted by the applicant

We would also like to highlight an additional inconsistency in the implied height of the new garage. On page 17 of the Master Set of Plans, it also suggests that the new garage would be built up to the height of the existing garage at 41 UCA. However, the drawing over states the height of the existing garage by approximately 50 centimetres. This would cause even greater view loss than in the image directly above.



# (b) View loss caused by new trees

As part of the development the applicant would remove some existing trees and plant some new ones, principally along the western edge of the property. This has the potential to cause significant additional view loss to us. We also believe this would cause significant view loss to the properties at 48 and 50 UCA, as the trees would be in their direct line of sight across the Harbour.

We estimate that trees just four metres above UCA street level would eliminate our view across to South Head. The trees at 43 UCA show the major impact they can have on view loss.



# 3. Public view loss from Upper Clifford Avenue and Ashley Parade

Upper Clifford Avenue and Ashley Parade receive a significant amount of foot traffic. This is not only local residents, but also members of the general public on their way to Manly or heading westwards to nearby areas like North Harbour Reserve. We would like to highlight that the DA would have a significant impact on iconic Harbour views for the general public. This is not the case at 43 UCA which has a much lower frontage onto UCA.



We also note that the owners of Unit 1 would have to walk outside along the footpath to put rubbish in their bins. We believe this can be amended to provide a friendlier street design.

# 4. Requests of the Council

We hope we have demonstrated that the proposed DA would cause substantial view loss from our house and is not consistent with the view sharing principles established in Tenacity Consulting Pty Ltd vs Warringah Council [2004] NSWLEC140. This would significantly reduce both the enjoyment of living in our home and its market value.

The proposed move from a single garage to a double would be a major cause of view loss for us. The lift core overrun also adds significant site bulk. The extent of our view loss is very sensitive to changes in the height of the garage / living area in Unit 1 - for example, the difference of around one metre in height results in either minimal view loss or devastating view loss. This shows that small changes to the design of the garage and living area of Unit 1 could alleviate our view loss.

# **Requests of the Council**

- (a) We request that the plans be resubmitted to include the missing information that was highlighted in section 1 of this letter. Of particular importance to us are the Unit 1 garage, building and lift overrun heights.
- (b) We request that the applicant be required to provide certainty of the heights above UCA street level for the garage and the living area of Unit 1 (including the lift overrun):
  - i. With respect to the height of the new garage, this should also be made with reference to the garage at 39 UCA as this will not change during the build process.
  - ii. With respect to the living area and lift overrun of Unit 1, this should also be made with reference to the roof height of the new garage.
- (c) We request that the Council does not approve any plans that reduce the ocean views from our house, as only minor changes to the height of the frontage onto UCA would be required to avoid this. This could be done in a number of ways:
  - i. By exploiting the voids below Unit 1 and / or excavating deeper into the land to lower the height of the development so that it has no or minimal frontage onto UCA. This is the case at 43 UCA which also has three units; or
  - ii. By retaining a single-width garage in the same place as the existing garage but moving to a car stacker to provide two spots. This would remove the need for a double-width garage which is what causes a large part of the view loss for us. Movement of the position of the lift with the resulting overrun would also assist. Please see attached sketch designs for some potential design modifications to suit and information on a suitable type of car stacker; or
  - iii. By adopting a similar design to that at 43 UCA, with a driveway on one side of the property and garage within the building structure.
- (d) In respect of the new trees which will be planted, we request that:
  - i. No trees be planted with a maturity height that will exceed the roof height of the unit next to which they are situated; and
  - ii. Given the potential for tree maturity heights to be unpredictable, an obligation be placed on the owners of the units to maintain tree heights as per 4(d)(i).

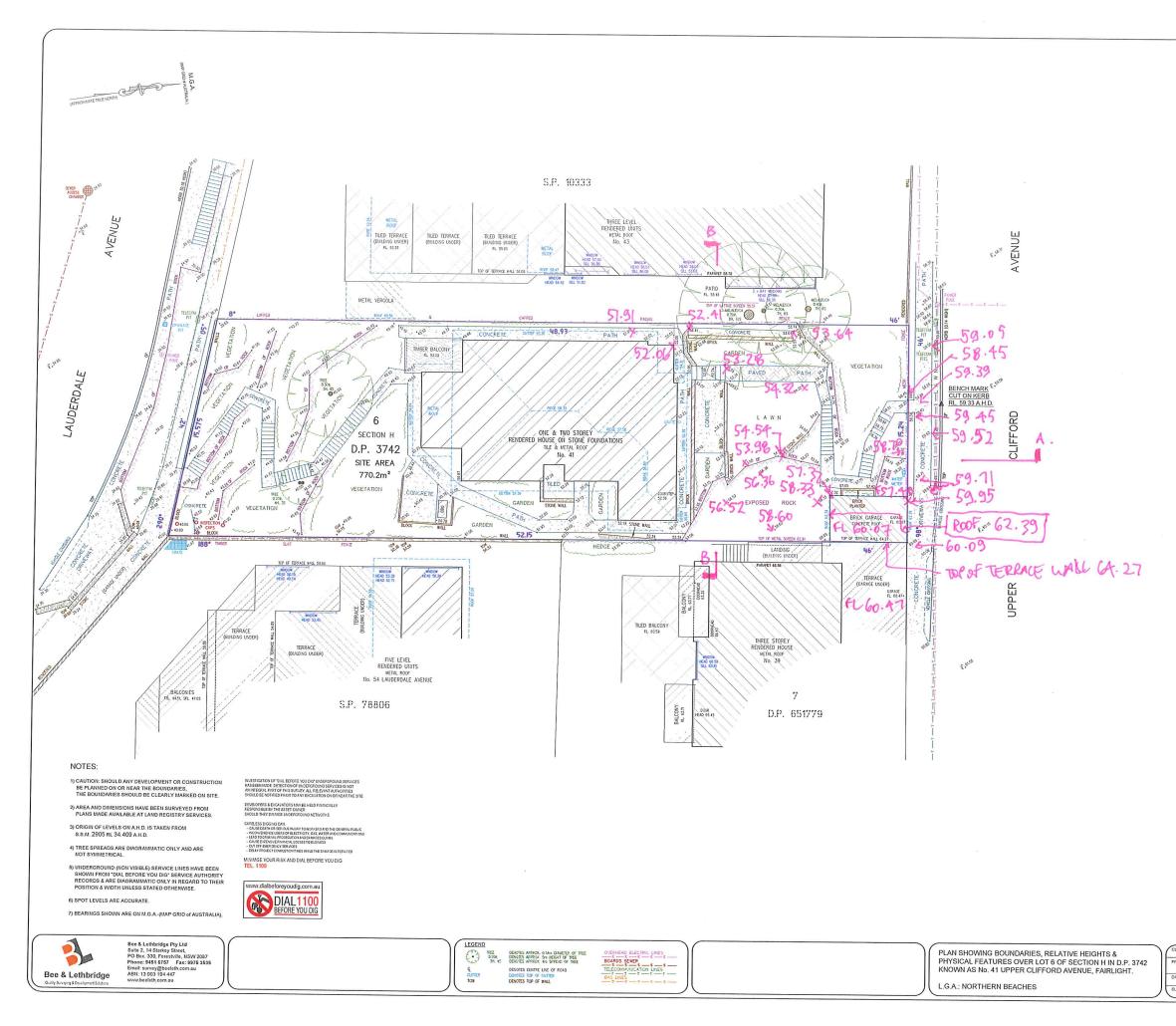
- (e) We request that a case manager be assigned to this DA, given the significant number of local properties affected by it. Ideally the case manager would meet with affected property owners individually on location to witness their concerns (with appropriate social distancing).
- (f) Before any plans are approved by the Council, we request that the applicant be obligated to erect sight poles of the draft designs so that we can accurately understand the view loss. It is very challenging to be confident of the DA's impact on ocean views without a physical structure in place, given the sloping land and when the view loss is impacted by the height, length and width of the various buildings.

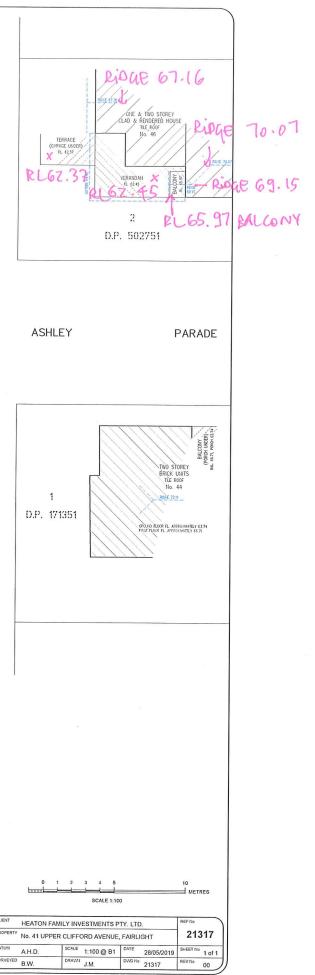
Finally, we would like to make it clear it is not our wish that any DA of this nature be prevented. Not only do we respect the right of the owners to develop the land, but we believe it can (with the right design that minimises any view, light and privacy loss for local properties) improve the neighbourhood and add value to the local area.

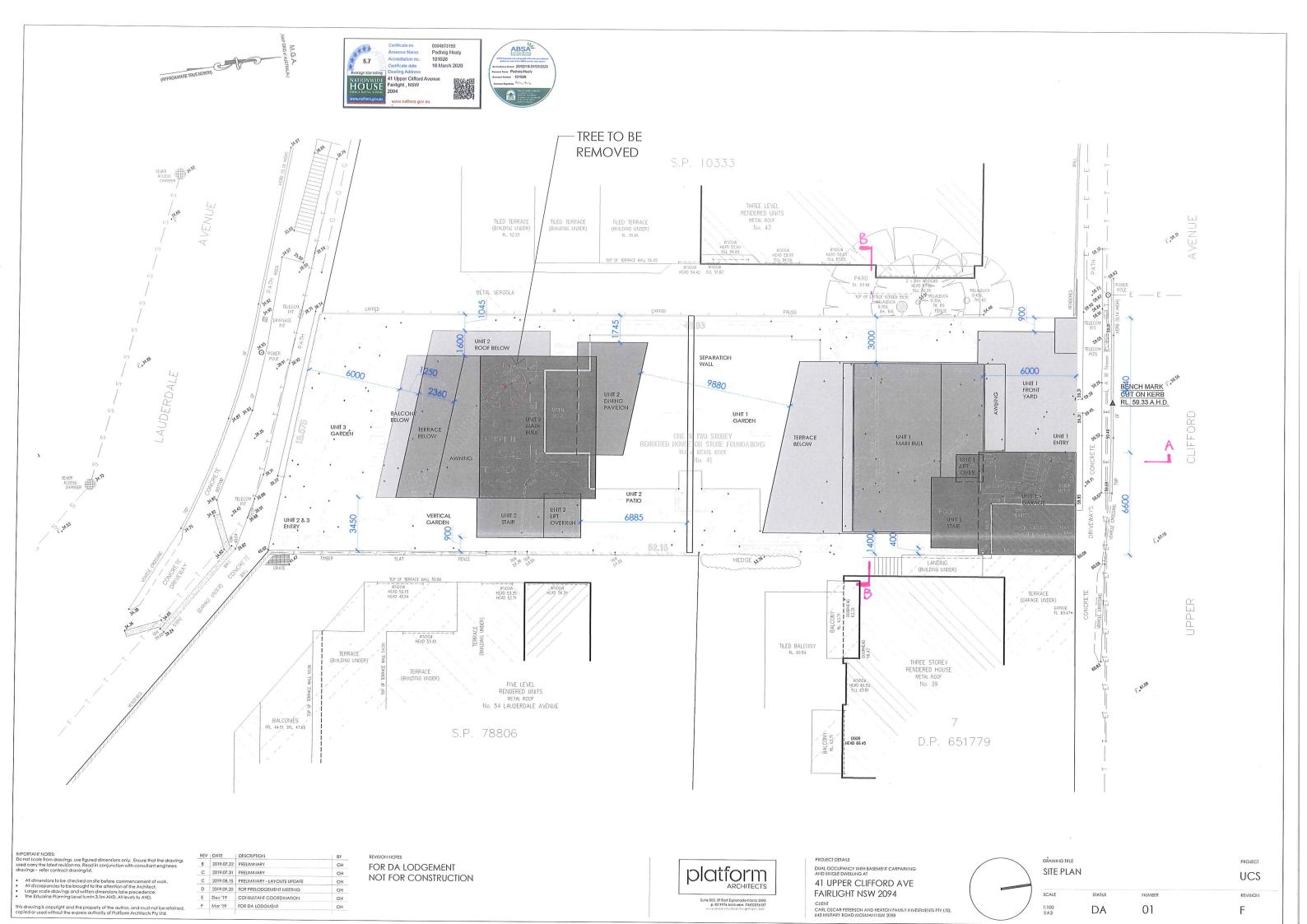
In that vein, we are happy to engage with the council and the applicant in the hope of coming to an acceptable outcome for all stakeholders.

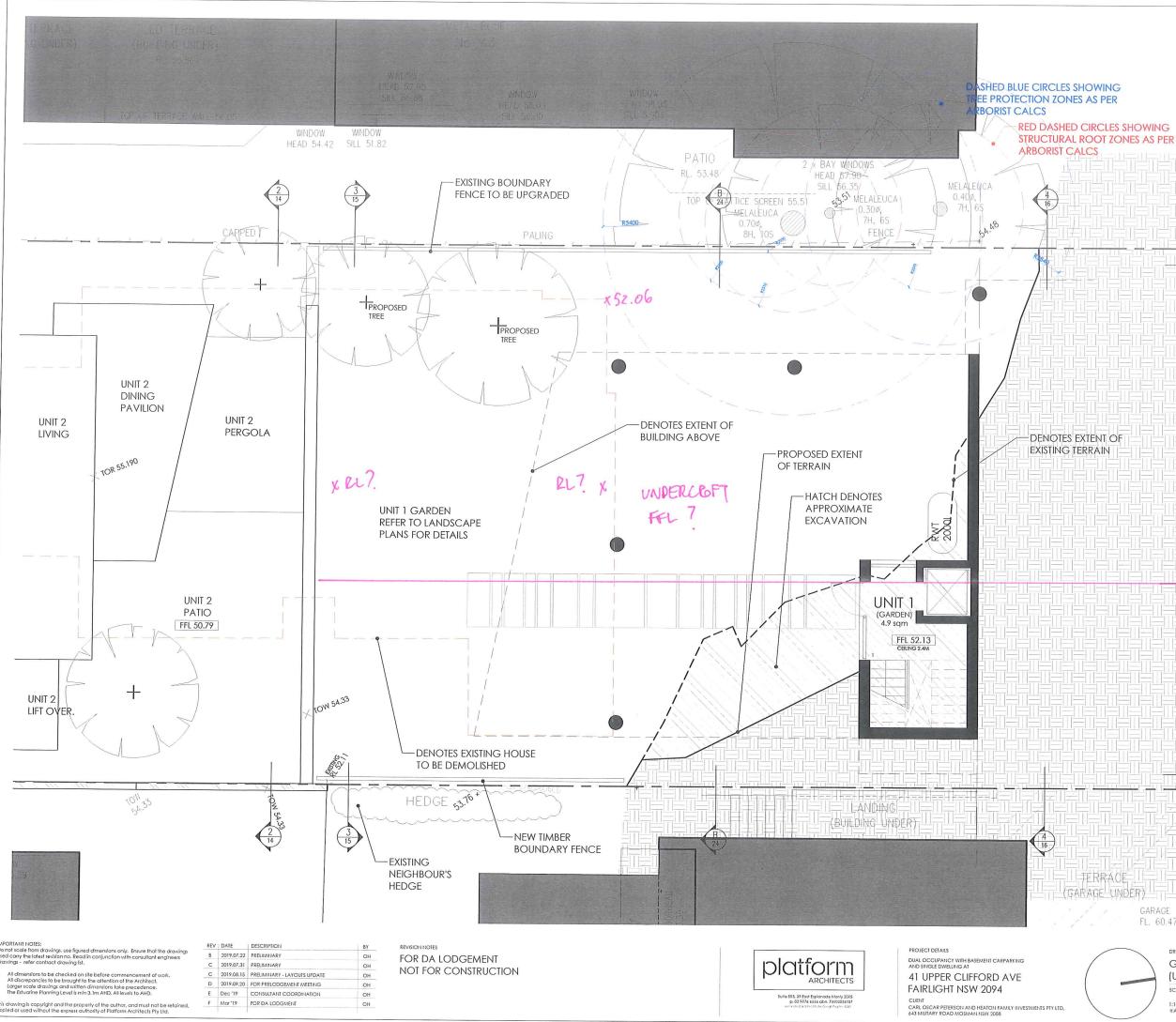
Yours faithfully,

Graeme Plowman Jo-ann Plowman











0004673150 Padraig Healy 101026 16 March 2020

ABSA

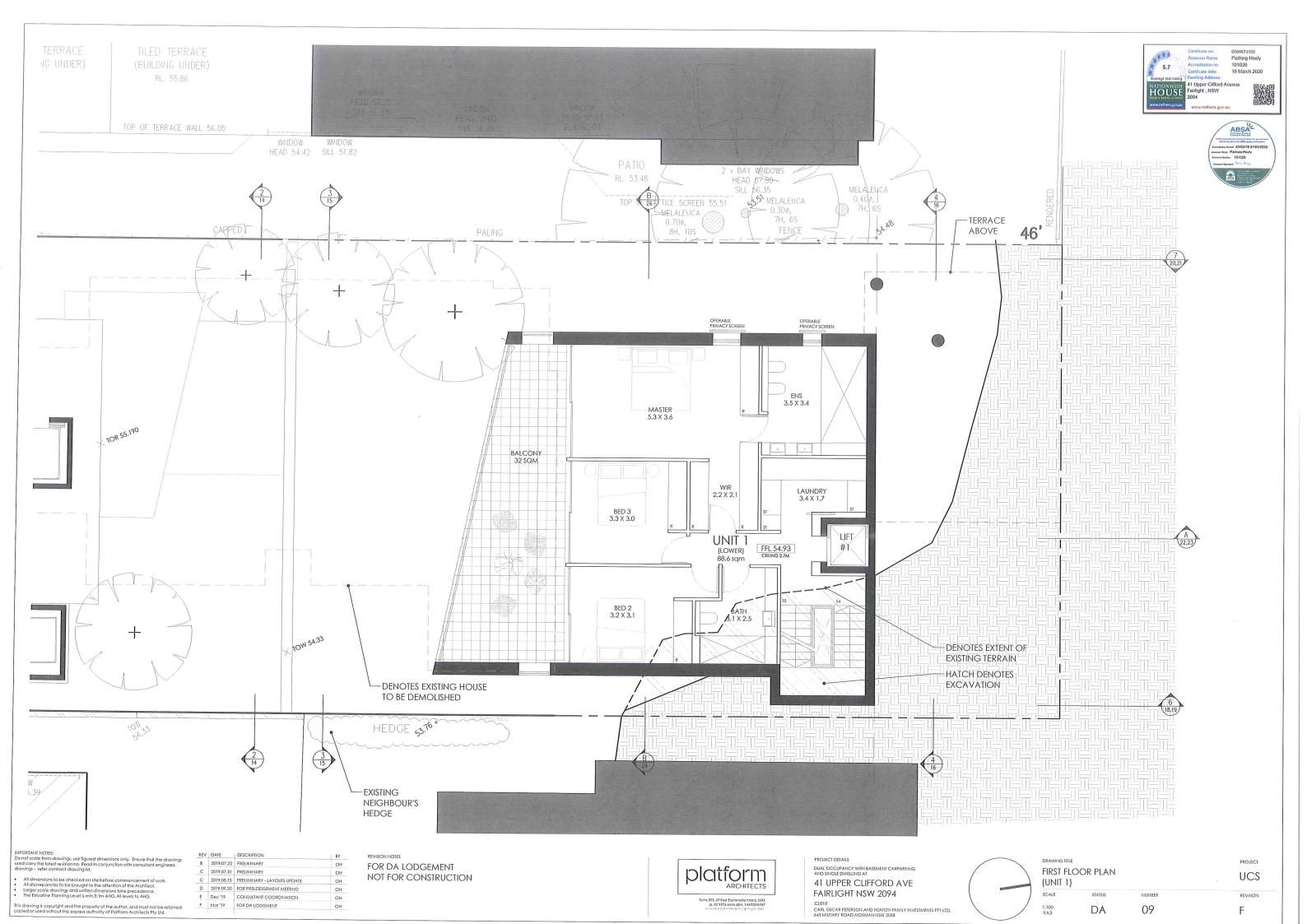
Padraig Healy GARAGE FL. 60.47+ DRAWING TITLE PROJECT GROUND FLOOR PLAN - GARDEN UCS (UNIT 1) SCALE STATUS NUMBER REVISION

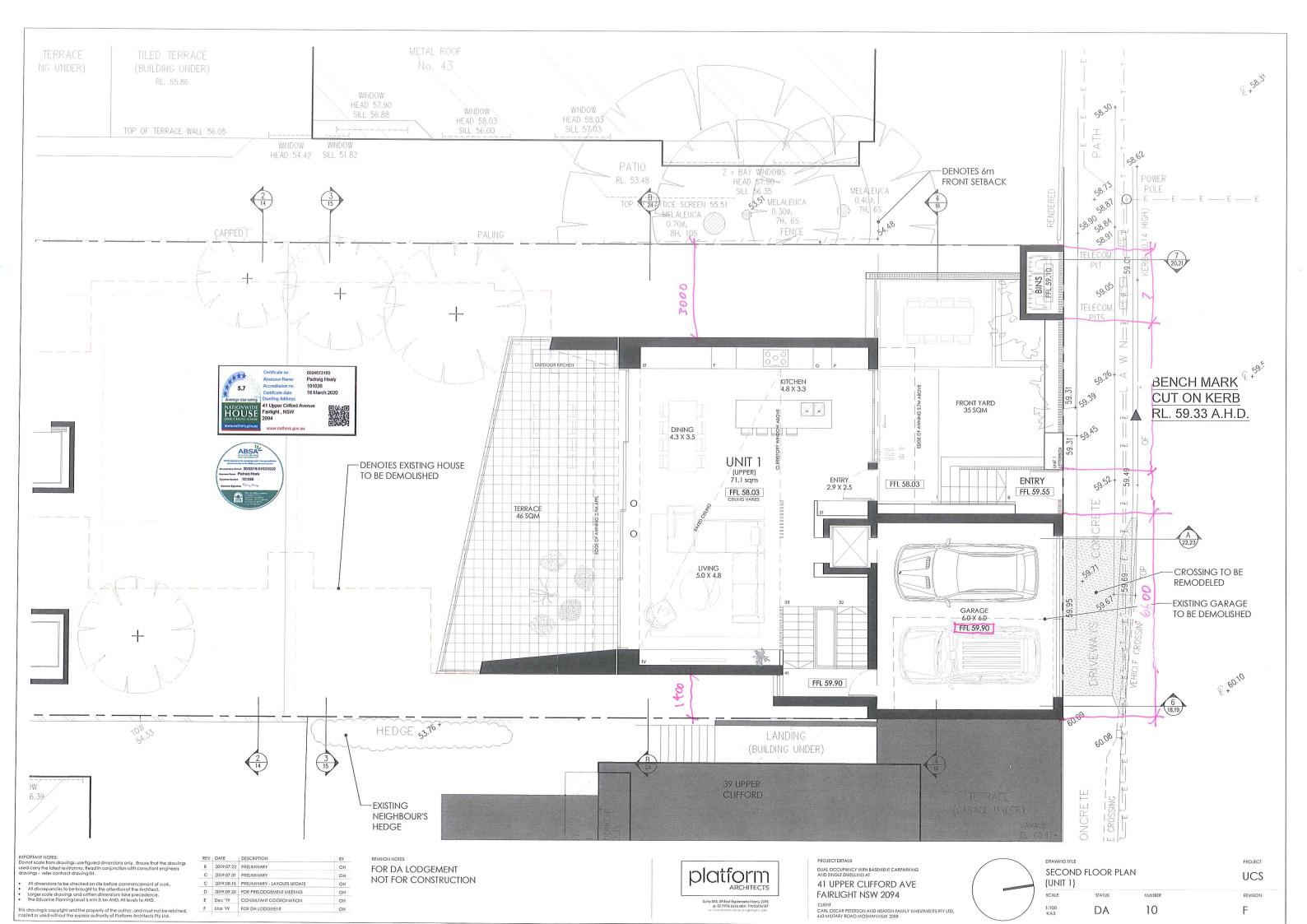
08

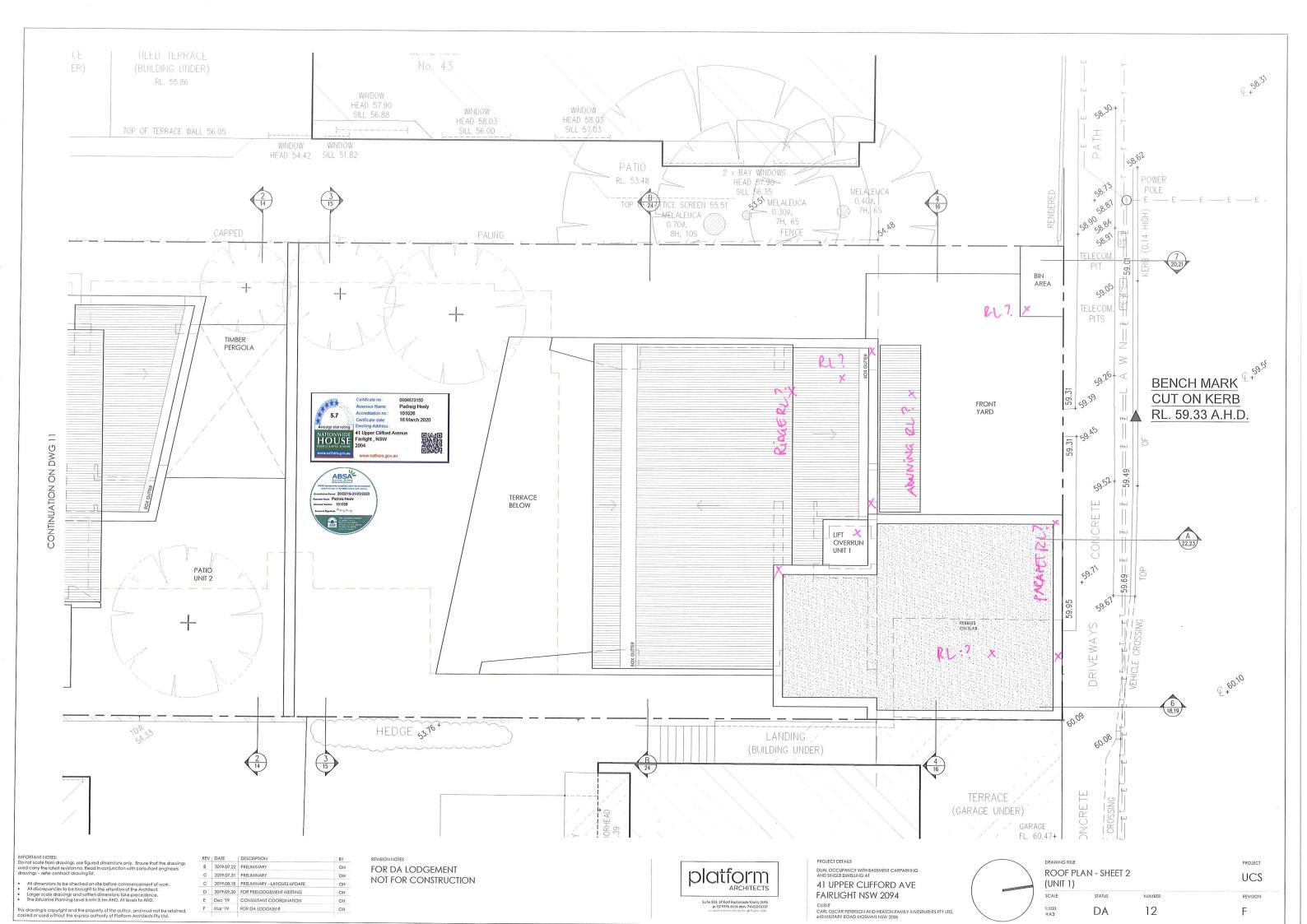
F

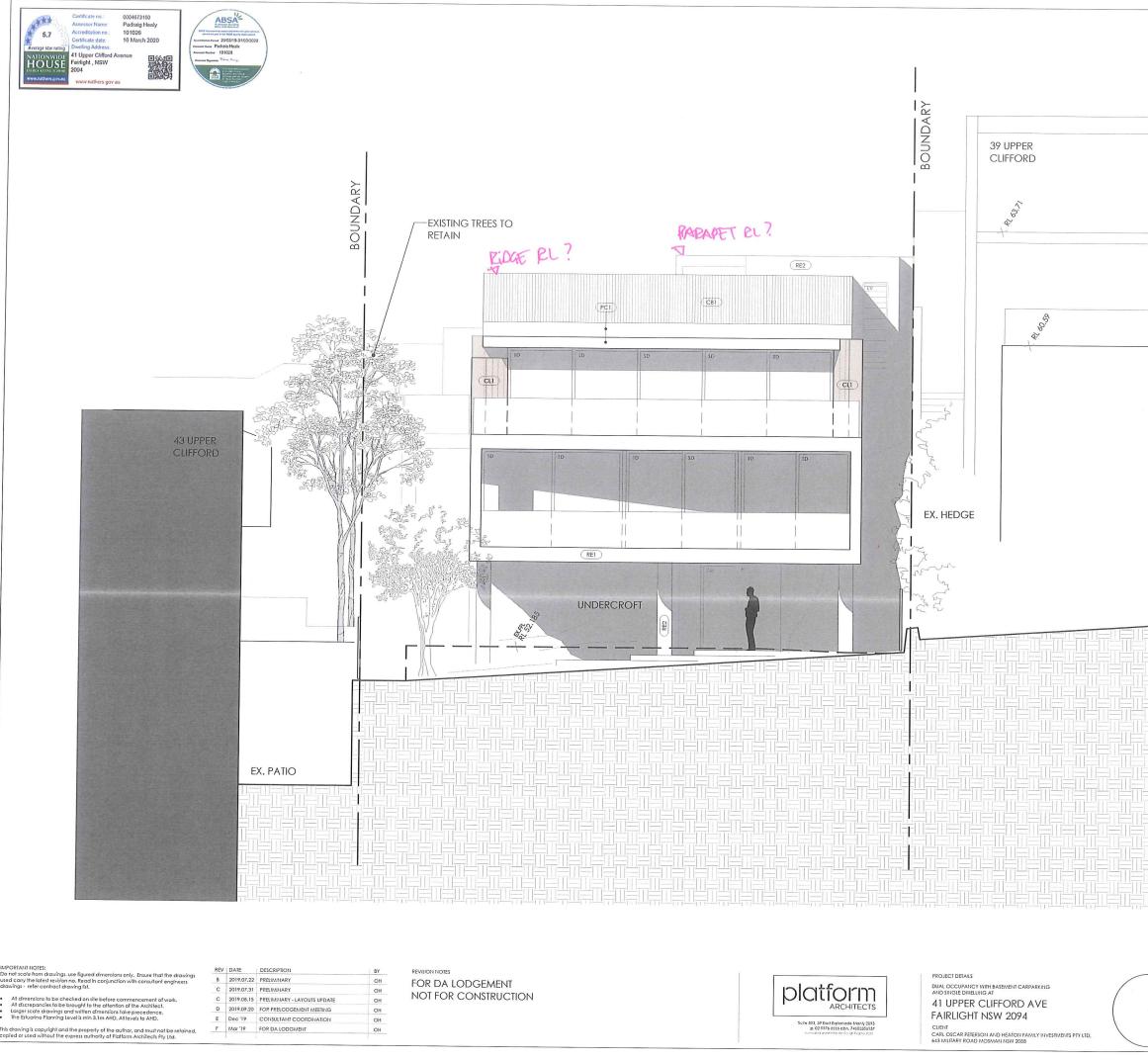
DA

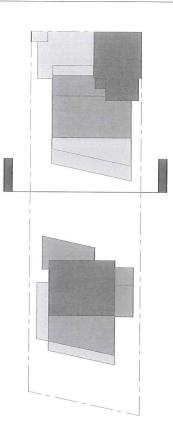
1:100 @A3











# LEGEND

SD LV BF SW AW F GB SK	SLIDING DOOR PANEL GLAZED LOUVRE WINDOW BIFOLD DOOR SWING DOOR AWNING WINDOW FIXED GLAZING GLASS BALUSTRADE SKYLIGHT	
CL1	CLADDING TYPE 1	
CL2	CLADDING TYPE 2	
REI	RENDER TYPE 1	
RE2	RENDER TYPE 2	
TIM	EXTERNAL TIMBER	
PC1	POWDER COATED METAL TYPE 1	
CB1	COLORBOND ROOFING TYPE 1	
*REFER TO	FINISHES SCHEDULE FOR DETAILS	
		PROJECT
UNIT 1	13 - South	UCS

NUMBER

15

REVISION

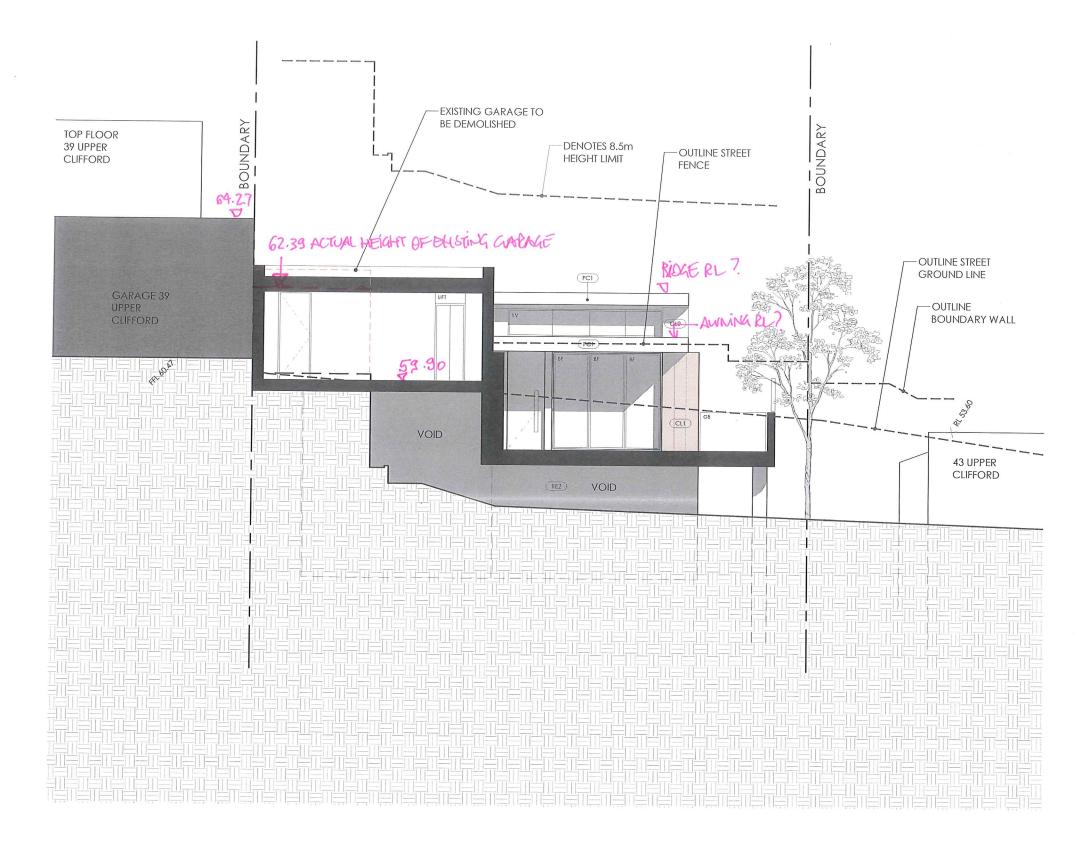
F

SCALE

1:100 @A3 STATUS

DA





(11) NOTES: cole from drawings, use figured dimensions only. Ensure that the drawings ry the latest revision no. Read in conjunction with consultant engineers s - refer contract drawing list.

All dimensions to be checked on site before commencement of All discrepancies to be brought to the attention of the Architect. Larger scale drawings and written dimensions take procedence. The Estuarine Planning Level is min 3.1m AHD. All levels to AHD.

C 2019.07.31 PRELIMINARY 2019.08.15 PRELIMINARY - LAYOUTS UPDATE

D 2019.09.20 FOR PRELODGEMENT MEETING

REV DATE DESCRIPTION

8 2019.07.22 PRELIMINARY

E Dec '19 CONSULTANT COORDINATION wing is copyright and the property of the author, and must not be retained, or used without the express authority of Platform Architects Pty Ltd.

- F Mar '19 FOR DA LODGMENT

BY

OH

ОН

ОН

OH

ОН

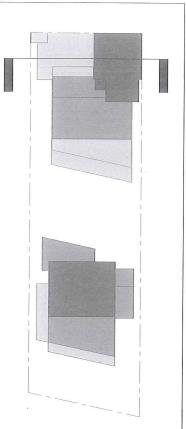
ОН

FOR DA LODGEMENT NOT FOR CONSTRUCTION

REVISION NOT

platform ARCHITECTS Suite 503, 37 East Esplanade Manly 2075 p. 02 9976 6666 abn. 74602856157

PROJECT DETAILS DUAL OCCUPANCY WITH BASEMENT CARPARKING AND SINGLE DWELLING AT 41 UPPER CLIFFORD AVE FAIRLIGHT NSW 2094

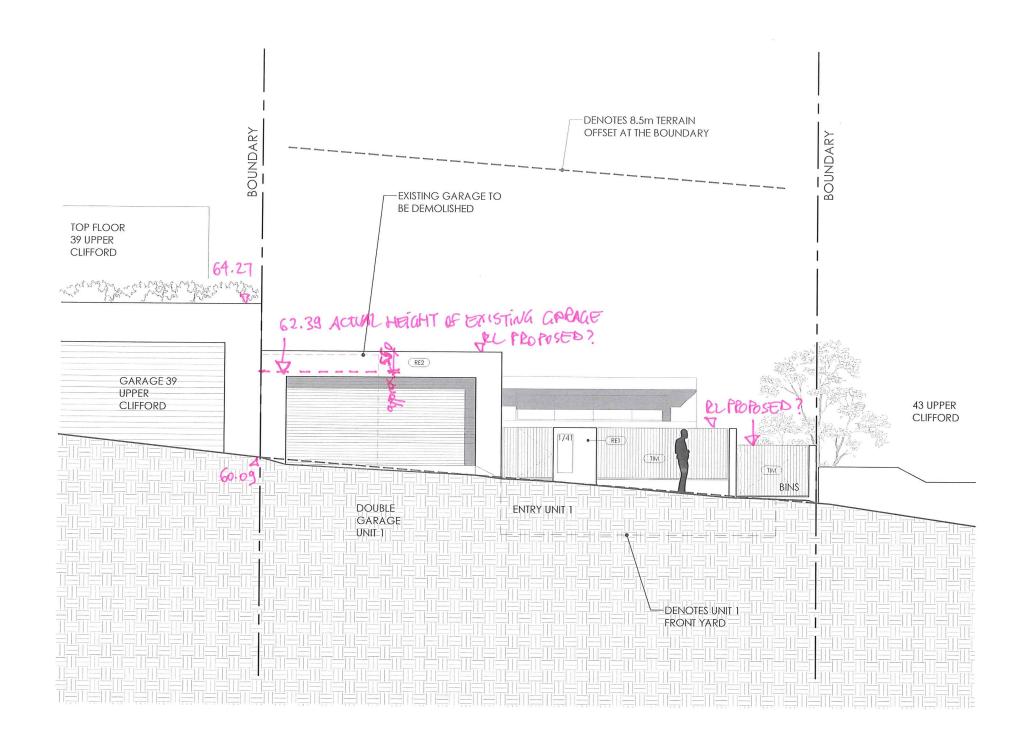


#### LEGEND

SD LV BF SW AW F GB SK	SLIDING DOOR PANEL GLAZED LOUVRE WINDOW BIFOLD DOOR SWING DOOR AWNING WINDOW FIXED GLAZING GLASS BALUSTRADE SKYLIGHT	
CL1	CLADDING TYPE 1	
CL2	CLADDING TYPE 2	
(RE1)	RENDER TYPE 1	
RE2	RENDER TYPE 2	
TIM	EXTERNAL TIMBER	
PC1	POWDER COATED METAL TYPE 1	
CB1	COLORBOND ROOFING TYPE 1	
*REFER TO	FINISHES SCHEDULE FOR DETAILS	
drawing title ELEVATION UNIT 1	I 4 - NORTH	PROJECT UCS

UNIT 1	ON 4 - NORI	П	UCS
SCALE	STATUS	NUMBER	REVISION
1:100 @A3	DA	16	F





(a) notes: cole from drawings, use ligured dimensions only. Ensure that the c rry the latest revision no. Read in conjunction with consultant engins s - refer contract drawing list.

nsions to be checked on site before commencement of pancies to be brought to the attention of the Architect cale drawings and written dimensions take precedence, arine Planning Level is mh 3.1m AHD. Att levels to AHD.

This drawing is copyright and the property of the author, and must not be retained, copied or used without the express authority of Platform Architects Pty Ltd.

B 2019.07.22 PRELIMINARY 2019.07.31 PRELIMINARY 2019.08.15 PRELIMINARY - LAYOUTS UPDATE D 2019.09.20 FOR PRELODGEMENT MEETING Dec '19 CONSULTANT COORDINATION F Mar '19 FOR DA LODGMENT

OH

OH

ОН

OH

OH

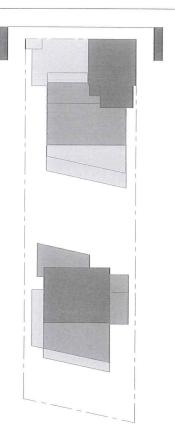
REV | DATE | DESCRIPTION

REVISION NOTES FOR DA LODGEMENT NOT FOR CONSTRUCTION



PROJECT DETAILS DUAL OCCUPANCY WITH BASEMENT CARPARKING AND SINGLE DWELLING AT 41 UPPER CLIFFORD AVE FAIRLIGHT NSW 2094

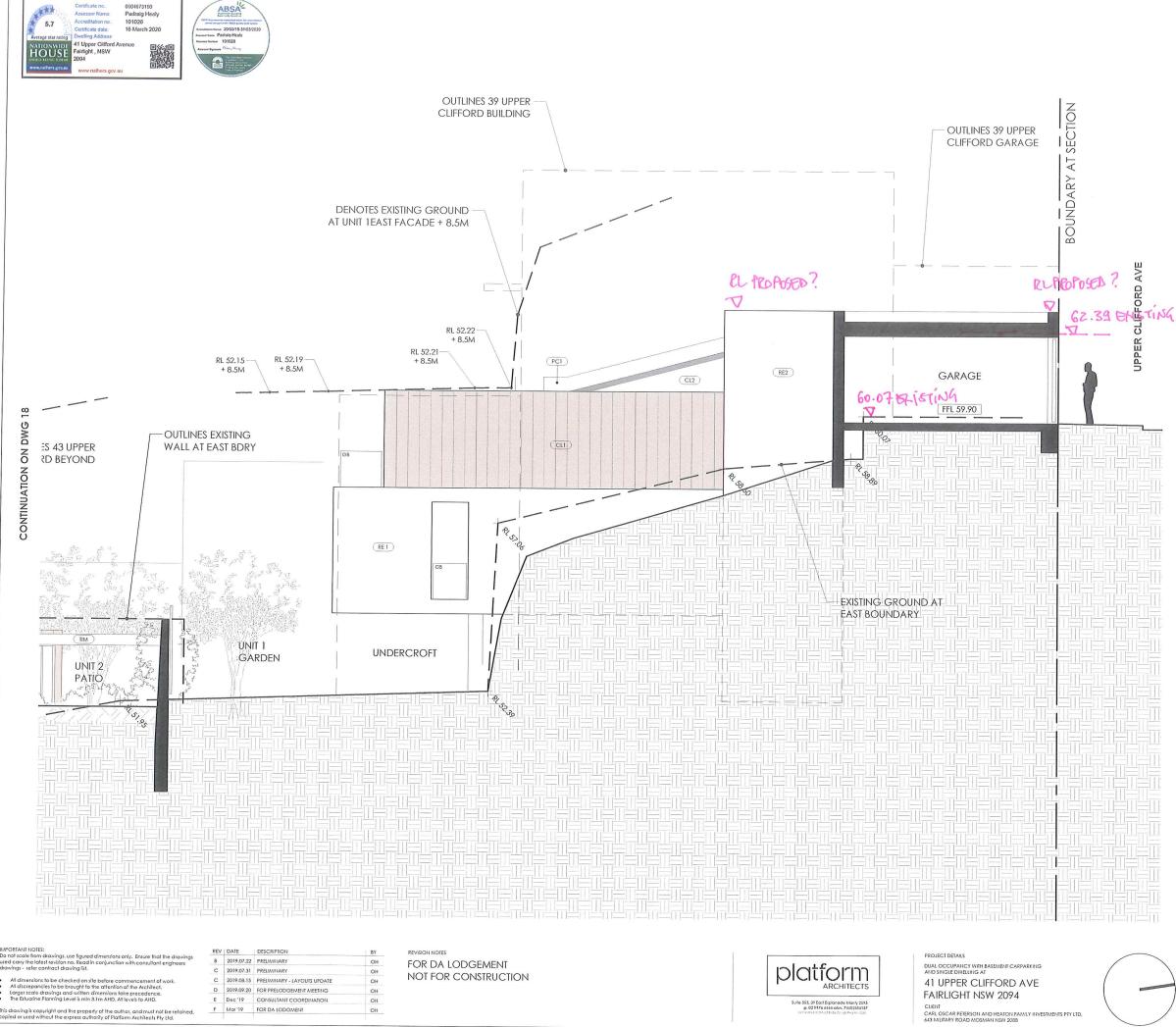
CUENT CARL OSCAR PETERSON AND HEATON FAMLY INVESTMENTS PTY LTD, 643 MILITARY ROAD MOSMAN NSW 2088

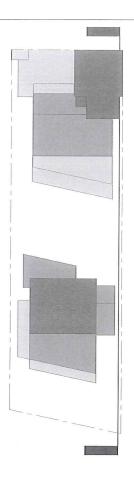


### LEGEND

SD LV BF SW AW F GB SK	SLIDING DOOR PANEL GLAZED LOUVRE WINDOW BIFOLD DOOR SWING DOOR AWNING WINDOW FIXED GLAZING GLASS BALUSTRADE SKYLIGHT	
CL1	CLADDING TYPE 1	
CL2	CLADDING TYPE 2	
RE1	RENDER TYPE 1	
RE2	RENDER TYPE 2	
TIM	EXTERNAL TIMBER	
PC1	POWDER COATED METAL TYPE 1	
CB1	COLORBOND ROOFING TYPE 1	
*REFER TO	FINISHES SCHEDULE FOR DETAILS	
DRAWING TITLE	I 5 - NORTH (UPPER	

DRAWING TITL	E		PROJECT
	ION 5 - NORT RD FRONTAG		UCS
SCALE	STATUS	NUMBER	REVISION
1:100 @A3	DA	17	F





LEGEND

SD

LV

BF

SW

AW

F

GB SK	GLASS BAI SKYLIGHT		
CL1	CLADDING	TYPE 1	
CL2	CLADDING	FTYPE 2	
(RE1)	RENDER TY	PE 1	
RE2	RENDER TY	PE 2	
TIM	EXTERNAL T	IMBER	
(PC1)	POWDER C	OATED METAL TYPE 1	
CB1	COLORBO	ND ROOFING TYPE 1	
*REFER TO	FINISHES SCI	HEDULE FOR DETAILS	
DRAWING TITLE			PROJECT
SECTIONAI SHEET 2	L ELEVATION	6 - EAST	UCS
SCALE	STATUS	NUMBER	REVISION
1:100 @A3	DA	19	F

SLIDING DOOR PANEL

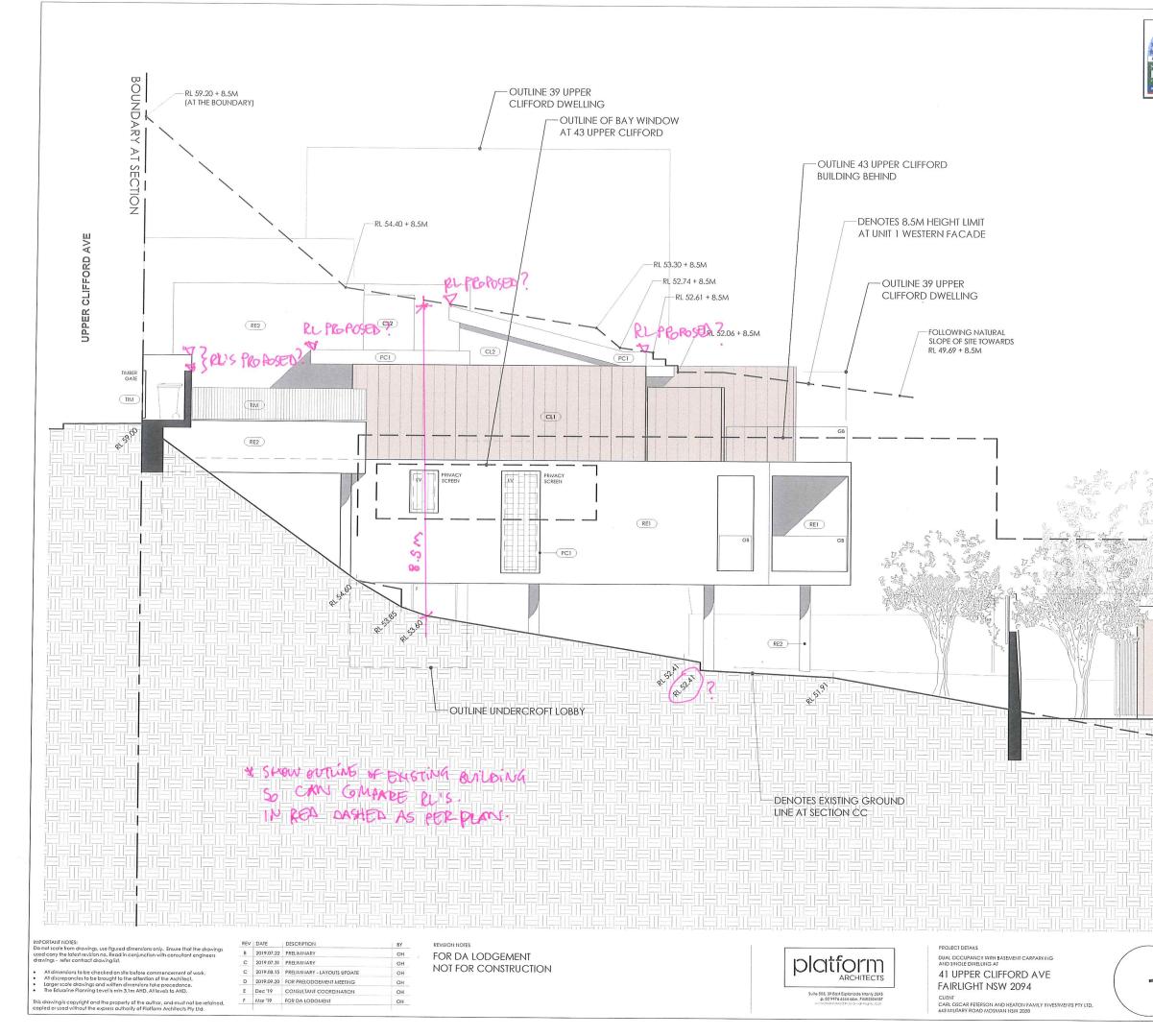
**BIFOLD DOOR** 

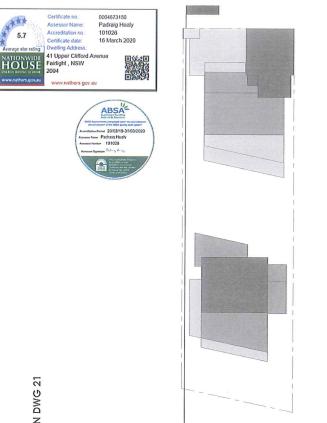
SWING DOOR

FIXED GLAZING

AWNING WINDOW

GLAZED LOUVRE WINDOW



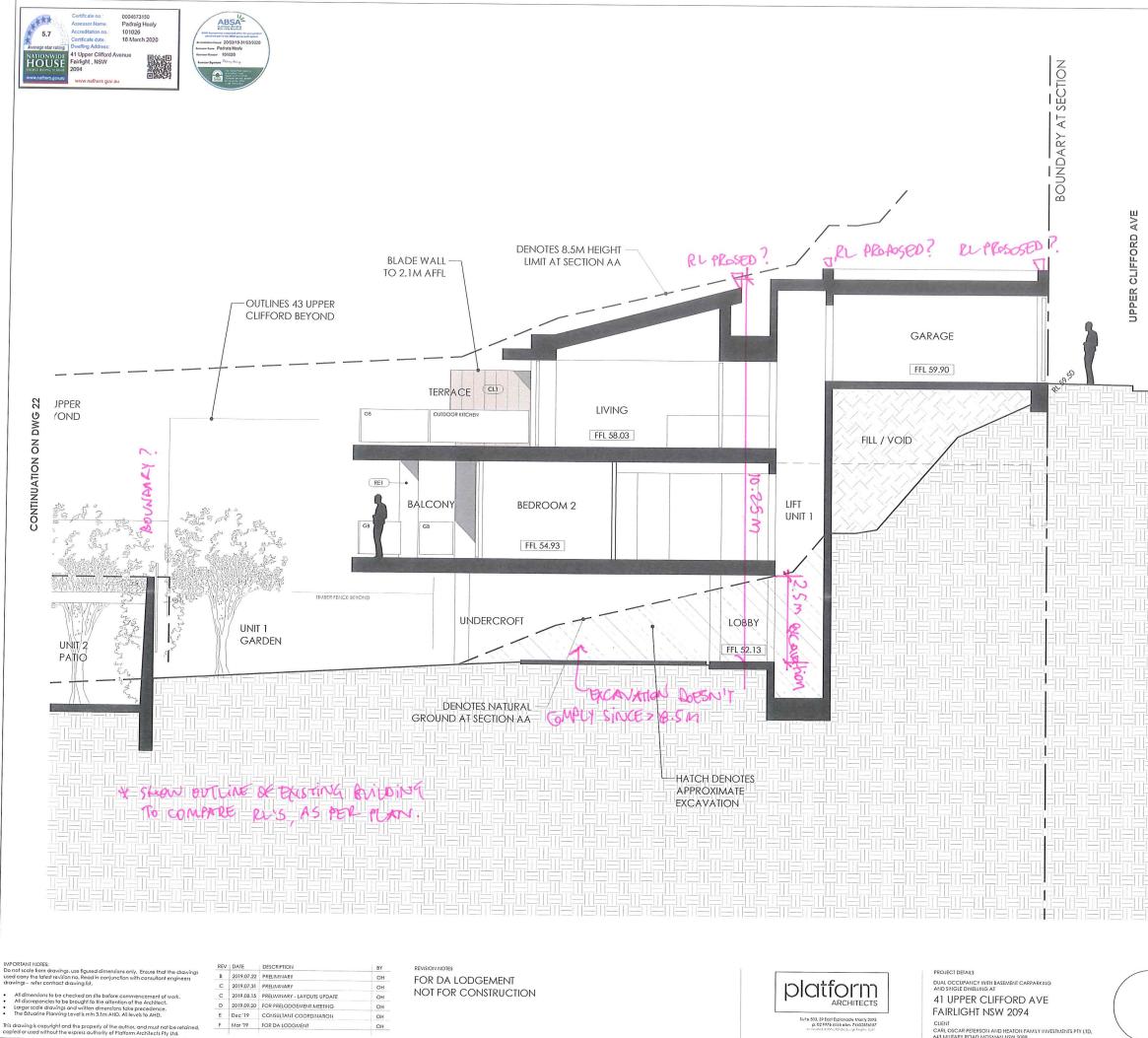


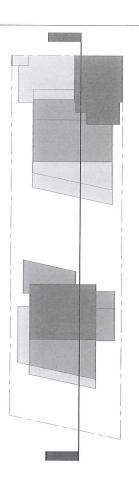
CONTINUATION ON DWG 21

### LEGEND

SD LV BF SW AW F GB SK	SLIDING DOOR PANEL GLAZED LOUVRE WINDOW BIFOLD DOOR SWING DOOR AWNING WINDOW FIXED GLAZING GLASS BALUSTRADE SKYLIGHT	
CL1	CLADDING TYPE 1	
CL2	CLADDING TYPE 2	
(RE1)	RENDER TYPE 1	
(RE2)	RENDER TYPE 2	
TIM	EXTERNAL TIMBER	
(PC1)	POWDER COATED METAL TYPE 1	
CB1	COLORBOND ROOFING TYPE 1	25 8
*REFER TO	FINISHES SCHEDULE FOR DETAILS	
DRAWING TITLE		PROJECT
	L ELEVATION 7 - WEST	UCS

SECTIO SHEET 1	NAL ELEVATIO	ON 7 - WEST	UCS
SCALE	STATUS	NUMBER	REVISION
1:100 @A3	DA	20	F





# LEGEND

1:100 @A3

DA

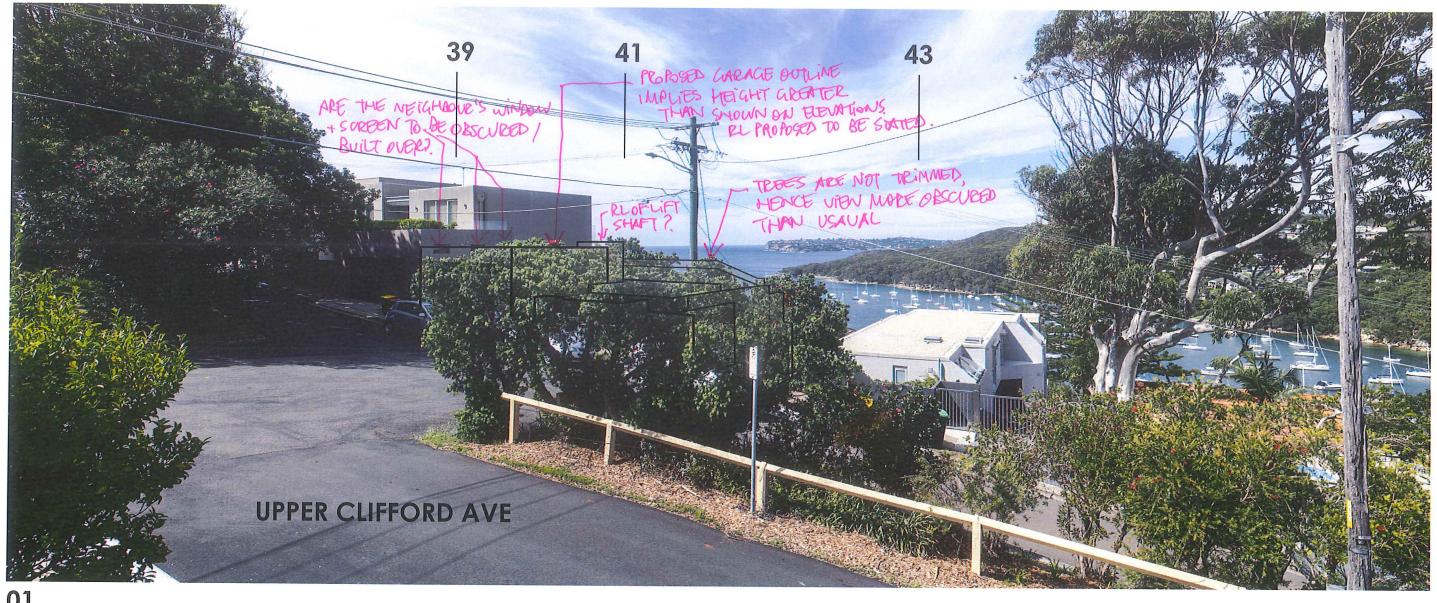
-		
SD	SLIDING DOOR PANEL	
LV BF	GLAZED LOUVRE WINDOW BIFOLD DOOR	
SW AW	SWING DOOR AWNING WINDOW	
F	FIXED GLAZING	
GB SK	GLASS BALUSTRADE SKYLIGHT	
CL1	CLADDING TYPE 1	
CL2	CLADDING TYPE 2	
(RE1)	RENDER TYPE 1	
RE2	RENDER TYPE 2	
	EXTERNAL TIMBER	
(PC1)	POWDER COATED METAL TYPE 1	
CB1	COLORBOND ROOFING TYPE 1	
*REFER TO	FINISHES SCHEDULE FOR DETAILS	
DRAWING TITLE	٨	PROJECT
SHEET 2	MA	UCS
SCALE	STATUS NUMBER	REVISION

23

F



PHOTO TAKEN FROM WESTERN EDGE AT BALUSTEADE, OF TERRACE. THIS UNDERSTITUTES VIEW LOSS FROM LIVING ROOM BALCONY AT STITING (STADING HEIGHT



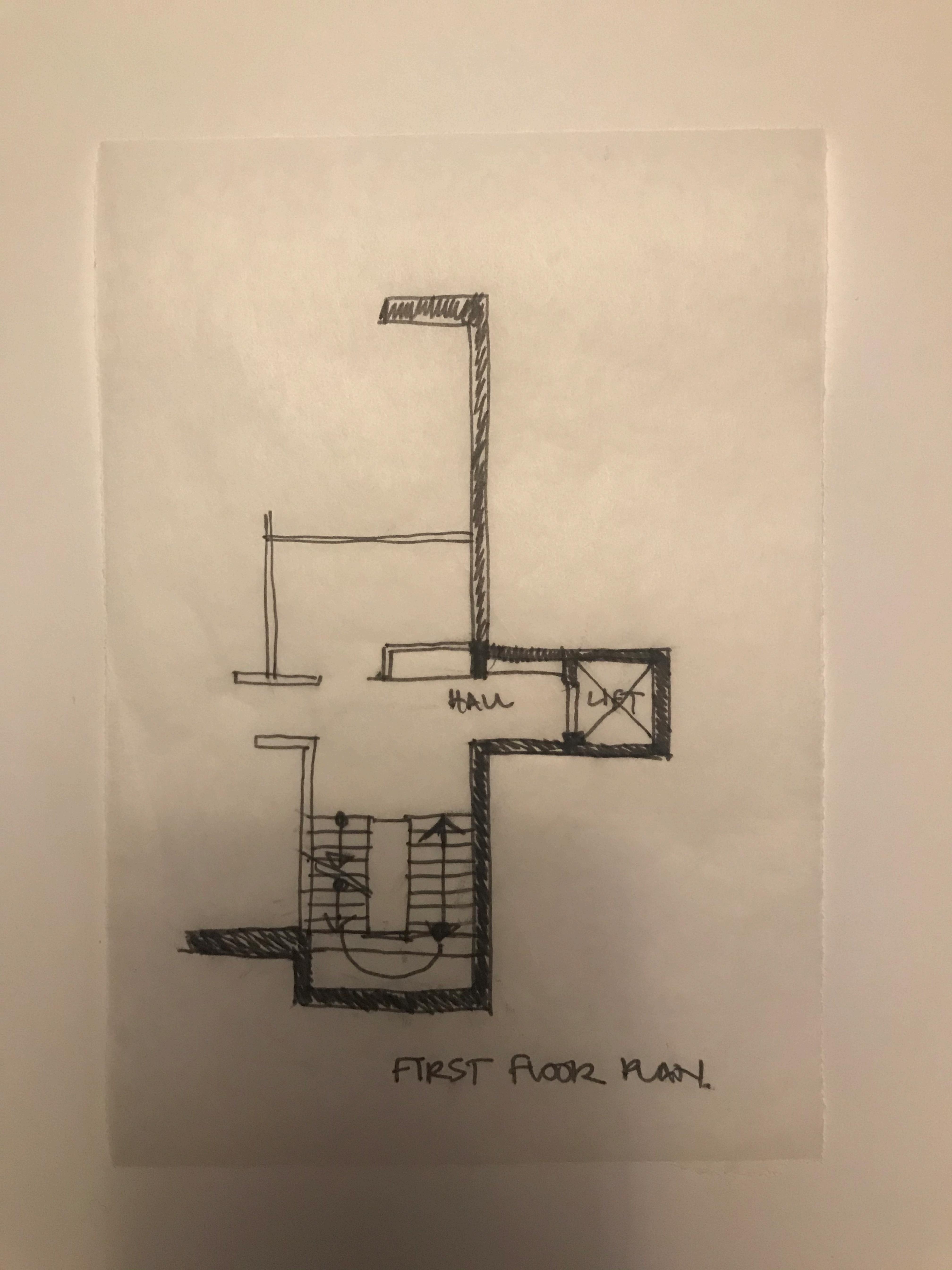
01 VIEW FROM 46 UPPER CLIFFORD AVE SOUTH TERRACE ON TOP OF THE GARAGE

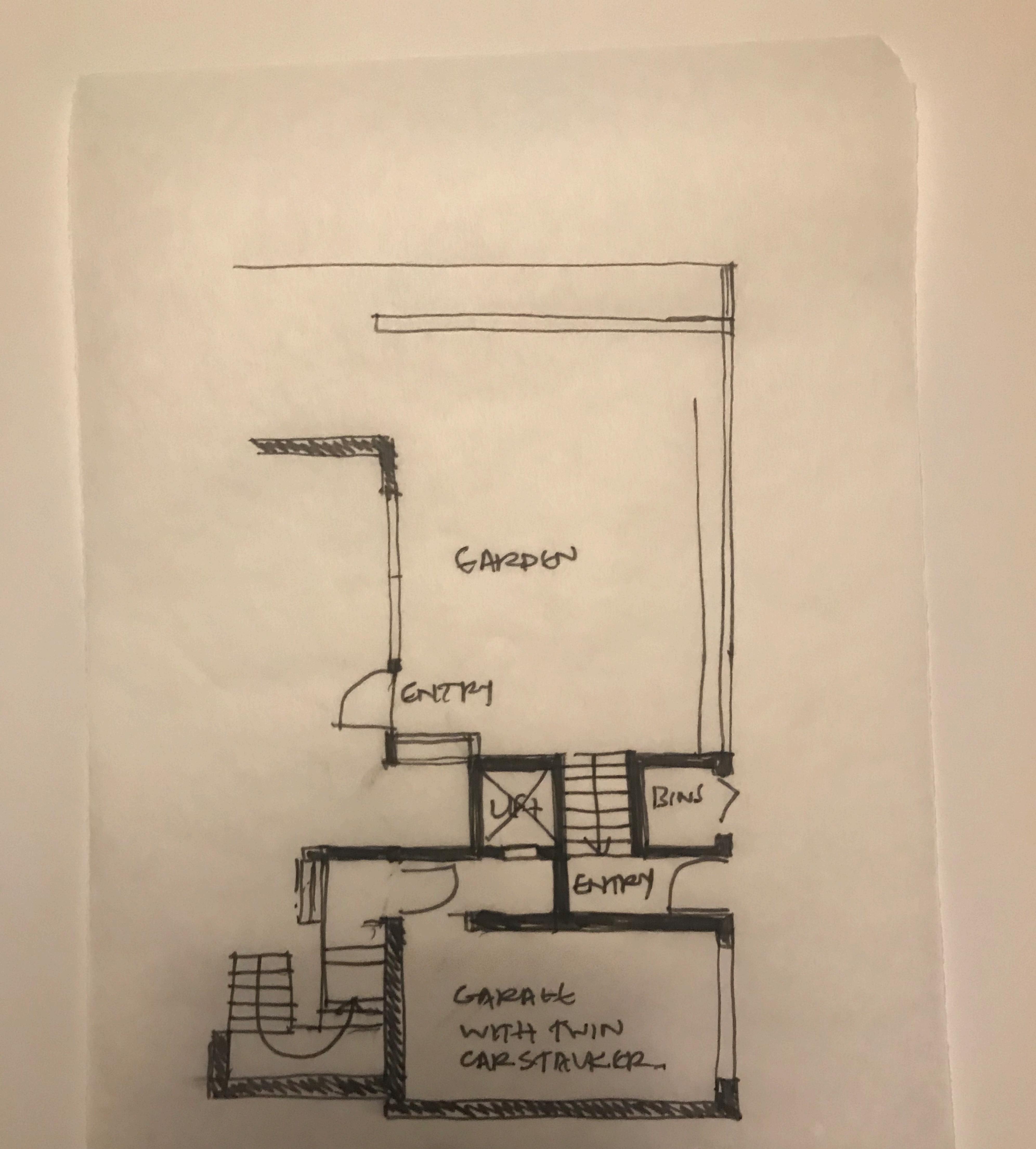


PROJECT DETAILS DUAL OCCUPANCY WITH BASEMENT CARPARKING AND SINGLE DWELLING AT 41 UPPER CLIFFORD AVE FAIRLIGHT NSW 2094 CLIENT CARL OSCAR PETE

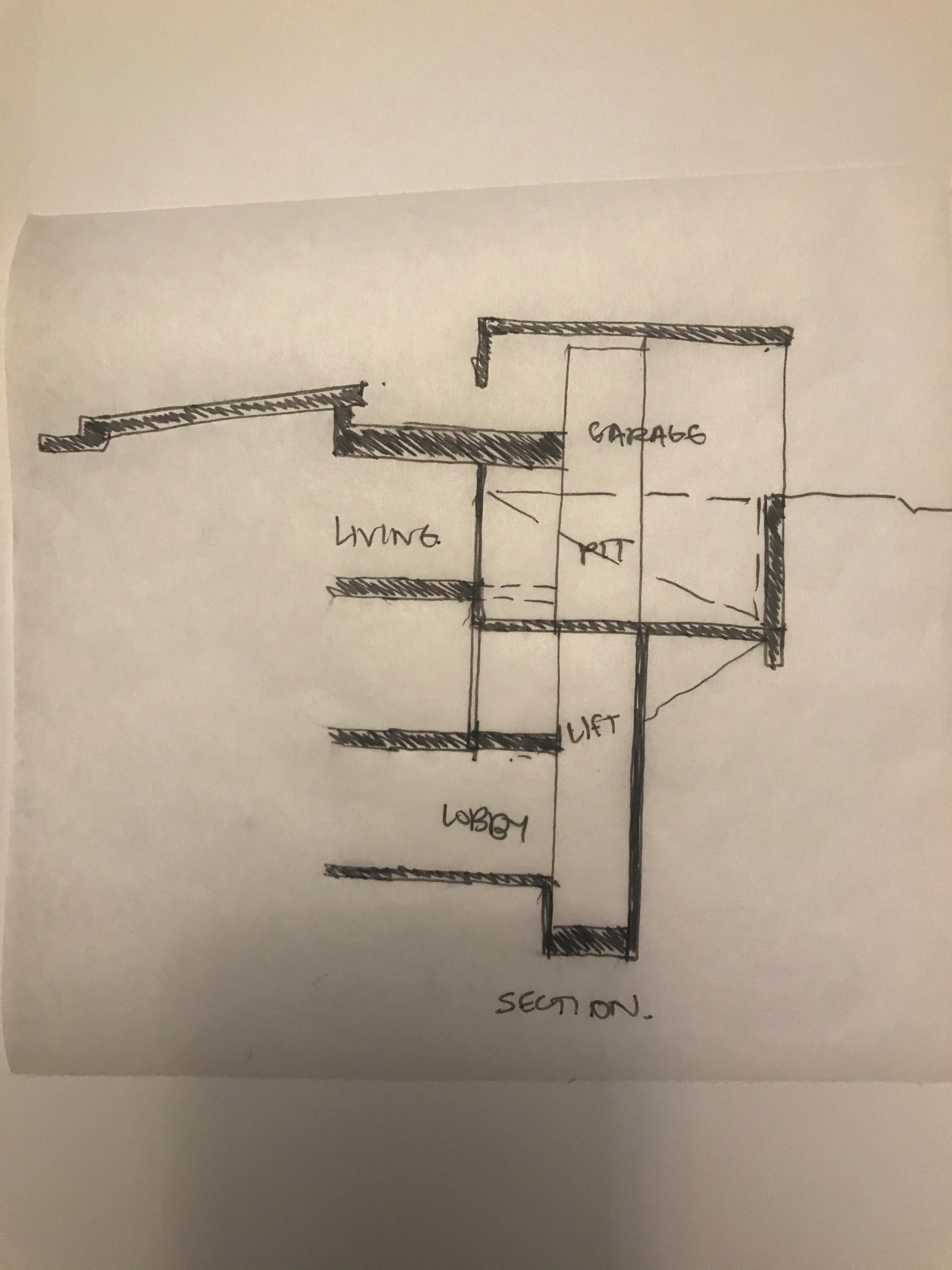
VIEW ANALYSIS SHEET 01		PROJECT
SCALE	STATUS	REVISION
NTS	DA	А







SECOND FLOOR PLAN









<u>a</u>

# QUADROPARKER N4902

THE IDEAL SOLUTION FOR THE EXTERIORS; ON 2 LEVELS



# SHORT DESCRIPTION

INDEPENDENT PARKING SYSTEM ON 2 LEVELS LOWER LEVEL: SYSTEM COLUMNS ON THE CORNERS UPPER LEVEL: WITHOUT COLUMNS INDIVIDUAL CONFIGURATION POSSIBILITIES FOR THE UPPER PLATFORM AVAILABLE ON REQUEST (e.g. WOODEN COVERING) SINGLE (2 CARS) AND DOUBLE SYSTEM (4 CARS) LOAD PER PARKING SPACE: 2.000 KG (STANDARD) UP TO 2.600 KG (OPTIONAL)

# APPLICATION

FOR EXTERIORS, WITH PIT SINGLE-FAMILY DWELLINGS MULTI-FAMILY DWELLINGS HOTELS OFFICE BUILDINGS CONDOMINIUMS COMMERCIALS FOR PERMANENT USERS ONLY





No need of separate

No need of chains.

For permanent and

instructed users only

All dimensions in cm

cylinders.

accessible

shafts near to the pit for

service or the power unit.

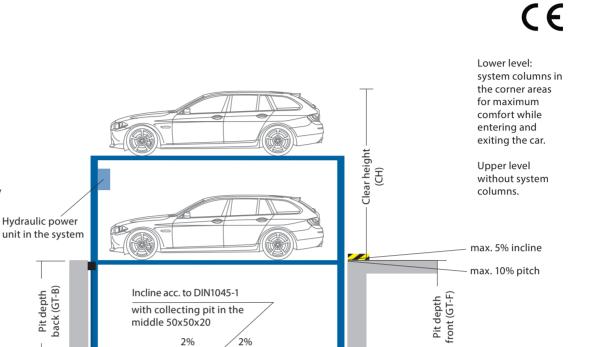
Everything can be inside the system's pit.

The system is driven by

Platforms are horizontally

# NOTE

The total height of the car including roof rail and antenna fixture must not exceed the maximum car height mentioned in the table below. Standard cars do not feature sport equipment (e.g. spoiler, etc.)



260

In case of partition walls: 10x10 cm wall opening (position: +/- 0 m) for electrical and hydraulic lines

Pit length **540** cm, for a 500 cm long car. Further pit lengths available upon request.

540

Load per parking space: max. 2.000 kg, wheel load: max. 500 kg. Optional: max. 2.600 kg, wheel load: max. 650 kg

PIT DEPTH FRONT (GT-F)	PIT DEPTH BACK (GT-B)	CLEAR HEIGHT (CH)	CAR HEIGHT BELOW	CAR HEIGHT ABOVE
190	190	from 330	155	from 155
200	200	from 340	165	from 155
210	210	from 350	175	from 155
220	220	from 360	185	from 155
230	230	from 370	195	from 155
260	260	from 400	225	from 155

# VEHICLE DATA: STANDARD CAR

VEHICLE DATA: STANDARD ESTATE CAR

min.18

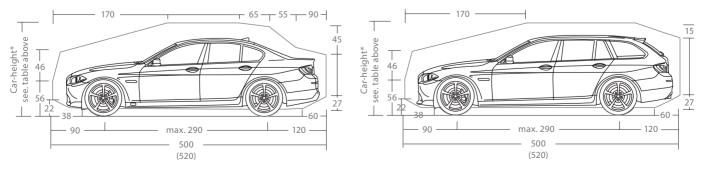
At the pit edge there is a

10 cm wide yellow-black

marking acc. to ISO 3864

to be provided by the

customer



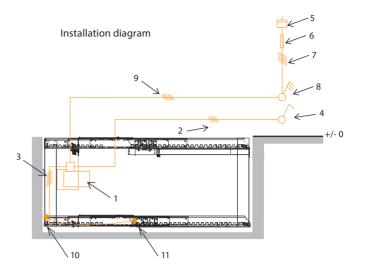
#### Made in Germany

# ELECTRICAL INSTALLATION AND FOUNDATION LOADS

#### Services covered by the NUSSBAUM Company

POS.	QTY.	DESCRIPTION
1	1x	Hydraulic power unit with three-phase mo- tor 230/400V, 50Hz, 6kW (2x 3,0kW)
2	1x	Control line 4x 1,0 <sup>2</sup> (for the standard key- operated switch)
3	1x	Control line 7x 1,0 <sup>2</sup> (for the locking of the key-operated switch)
4	1x	Control element

Positions 1 to 4 are covered by the Nussbaum company unless otherwise agreed in the offer or in the contract.



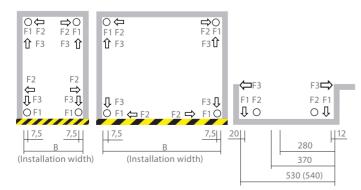
#### Services to be provided by the customer

POS	. QTY.	DESCRIPTION	POSITION	FREQUENCY
5	1x	Electricity meter	in the supply line	
6	1x	Blade fuse or circuit breaker 3x 25A, slow acc. to DIN VDE 0100 part 430	in the supply line	1x power unit
7	1x	Supply line 5x 4,0 mm <sup>2</sup> (3 PH + N + PE) with marked leads + protective earth conductor	to the mains switch	1x power unit
8	1x	Lockable network facility (main control switch)	near power unit	1x power unit
9	1x	Supply line $5x 4,0 \text{ mm}^2$ (3 PH + N + PE) with marked leads + protective earth conductor	to the power unit	1x power unit
10	1x	Foundation earth electrodes	pit floor corner	1x pit
11	1x	Equipotential bonding according to DIN EN 60204 from the connector of the foundation earth electrodes to the system	on the pit floor	1x system

#### FOUNDATION LOADS AND CONSTRUCTION

Foundation and pit walls must be planned so that they can absorb the loads of the parking system according to the schematic diagram shown below. All forces are discharged to the ground by base plates with a minimum area of 150 cm<sup>2</sup>. The base plates of the parking system are fastened with metal heavy duty anchor bolts; the borehole is approx. 14 cm deep. Optionally, instead of metal heavy duty anchor bolts, the base plates can be fastened using shear connectors, e.g. in case of watertight concrete or increased noise insulation. The clarification of the fastening methods shall be provided by the customer, if necessary, the shear connectors can be delivered against surcharge.

Foundation, walls and ceilings shall be provided by the customer and completed prior to assembly start and must be true to size, clean and dry. Floor and walls (below the entrance level) made of armoured concrete, concrete quality at least: C25/30.



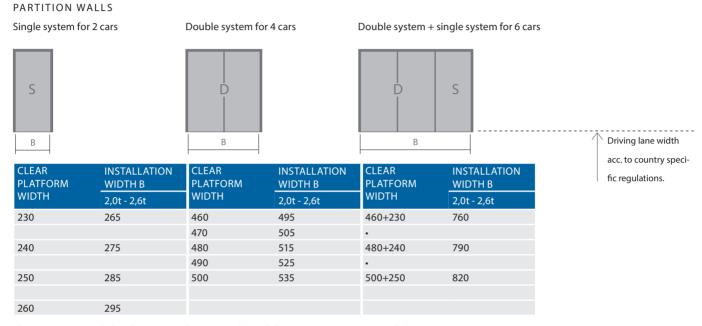
LOADS F	SINGLE SYSTEM 2.000KG	DOUBLE SYSTEM 2.000KG	SINGLE SYSTEM 2.600KG	DOUBLE SYSTEM 2.600KG
F1	20 kN	35 kN	28 kN	45 kN
F2	6 kN	6 kN	6 kN	6 kN
F3	6 kN	6 kN	6 kN	6 kN

Dimensions in cm. All Dimensions are minimum dimensions. Tolerances shall be

taken into account additionally, see page "width dimensions for garages".

# WIDTH DIMENSIONS AND PIT FLOOR

All dimensions in cm. All dimensions are minimum dimensions. Advice for planning and tendering: Generally masonry and concrete works are to be conducted according to the German norm VOB/C (DIN 18330 and DIN 18331). In the mentioned norm are pointed the tollerances that are to be fulfilled according to DIN 18202. In this norm are defined the maximum permissible dimension variations as exceedance and shortfall of the nominal size. The nominal size should be planned in order to meet the minimum dimensions necessary for the parking system.

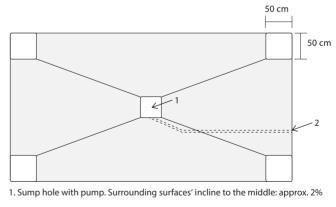


The power unit is installed on the system and moves together with the system. No extra space needed.

#### INFORMATION ABOUT THE PIT FLOOR

The pit floor should be built according to the drawing on the right. The four corners, On this surface are the lifting cylinders. These surface must have dimensions 50 x 50 cm and must be even.

In the middle of the pit floor there must be a sump hole in which there must be installed a pump to draw the water that may fall in the pit while dripping from cars orfrom the sides of the pit and brought out of the pit by a hose. Local regulations for prevention of water pollution shall be observed.



2. Drainage pipe to connect to the existing drainage system

For maintainance purposes, in emergency cases, the system can be brought to its basis position (lowered) by unscrewing the upper platform. In case the upper platform is covered with other materials than trapezoidal metal sheet, a shaft shall be built on the side of the pit in order to provide the possibility to come into the pit and maintain the system as the material covering the upper platform can't be unscrewed or removed.

The wall thickness of the pit depends on the loads from outside and must be calculated individually for each pit and each system.

# STANDARD FEATURES - IN THE SCOPE OF DELIVERY

#### NOTE

We suggest periodical maintainance, care and cleaning. Take advantage of NUSSBAUM maintainance agreements.

#### COMPONENT PARTS

Single system: consisting of 2 single platforms, 4 Telescope columns with hydraulic cylinders, hydraulic block and piping

#### and/or:

Double system: consisting of 2 double platforms 4 telescope columns with hydraulic cylinders, hydraulic block and piping

#### DRIVING SHEETS



Platforms with sidewalls and driving sheets made of trapezoidal sheet.

# DIMENSIONS OF THE SYSTEM

Parking space length: 500 cm Parking space width: 230 cm Parking space height: ab 155 cm Pit depth: 190 cm. Load per parking space: 2.000 kg.

# DOCUMENTATION

Brief operating instructions (fastened to the control unit), documentation (test book and operating instructions).

# ELECTRICAL INSTALLATION

For a list of services and interfaces please see the respective table in this brochure.

#### LOCKABLE KEY SWITCH



Control unit consisting of a lockable key switch (key can be taken off only in the basis position) with emergency-off in dead-man's control. Lifting and lowering by using the respective button.

#### HYDRAULIC POWER UNIT

Power unit "Silencio"



With hydraulic canalization and cabling to the main control switch. (The under oil unit is not loud thanks to the motorpumps-combination that absorbs sound and insulates form noise).

Measurements of the power unit + mains switch:

115 x 25 x 75 cm.

Position of the power unit:

The power unit is fastened on the system and each system is provided with its own power unit.

The power unit will be installed on the left side of the lower platform.

#### CORROSION PROTECTION

#### C3-Line

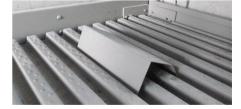
For Regions with average snowfall and humidity levels (standard in Germany).

#### C2-Line

Recommended only for regions with small or no snowfall and low humidity levels.

#### SAFETY DEVICES

- "Kommando-Folge-cylinder" (mounted on cross) to improve the synchronous drive of the platforms in case of unequal load charge.
- Safety device to avoid lowering in case of pipeline rupture.
- Fastening of the parking system and hydraulic power unit with stud-bolts, electrical cabling fastened with impact dowels.
- Handrails on the platforms where necessary to avoid danger of falling down from the system.



Wedge to help position the vehicle.

#### Note:

 Safety fences against shear and crushing points are a priority and must be provided by the customer.

#### NOTE

We suggest periodical maintainance, care and cleaning. Take advantage of NUSSBAUM maintainance agreements.

# OPTIONS AND EXTRA EQUIPMENT

Available upon request - Examples

#### DIMENSIONS OF THE SYSTEM

Parking space length: from 510 to 540 cm Parking space width: from 240 to 250 cm (S-system up to 260 cm) Parking space height: from 165 to 225 cm Pit depths: from 200/200 to 260/260 cm.

Fastening of the parking system with chemical anchors in case of heighthened foundation requirements or sound insulation.

# VEHICLE WEIGHT

Higher load per parking space: up to 2.300 kg or 2.600 kg.

# WEATHERPROOF CASING AND SUPPORTING PILLAR



Optionally with the key switch it is possible to deliver the following features: • Weatherproof casing for the key switch.

- Supporting pillar for the key switch.

# MOBILE SAFETY FENCES

The basis configuration is provided with wired grating. Alternatively it is possible to get plastic plates as safety fence.

#### DRIVING SHEETS



Upper platforms with Aluminium-bulb plates driving sheets and special driving wedge to help position the vehicle.

### UPPER PLATFORM COVERINGS

It is possible to deliver a special covering for the upper platform. For more information see next page. Details upon request.

#### LAUFSTEGE



Catwalk on trapez. sheet for more walking comfort

For better walking comfort Positioned on the left side of the parking space. 1,5 mm galvanized sheet, coined surface area. The catwalk is bolted to the driving sheet.

# CARPORT

It is possible to deliver a mobile roof for the system. For more information see next page. Details upon request.

#### CORROSION PROTECTION

C4-Line: driving sheets powdered on both sides

For regions with highly corrosive humidity levels.

#### HYDRAULIC

- HVLP 32-330 oil for extreme temperature variations.
- Heated hydraulic power unit.

### EXTRA SOUND INSULATION



Sound insulation hood for the power unit

Airborne noise package For the power unit to reduce the airborne noise.

Structure/borne noise package Measures to reduce the sound propagation from the parking system to the building.

# Note

 In order to comply with the DIN 4109/A1 Table 4 - requirements for the allowed noise level in areas in need of protection from noises coming from the technical equipment, the perimetral parts of the garage building shall be built with a sound reduction index Rw´ of at least 57 dB.



#### NOTE

Frame constructions cause a loss in the lower parking space height.

# **OPTIONAL CONFIGURATION POSSIBILITIES**

The fitting solution for every situation. Ask us!

# CARPORT - THE MOBILE ROOF

A mobile roof offers not only high protection against bad weather but is also a special eye-catcher. The wooden roof will be mounted on the existing platforms.



Systems with mobile roof seen from the front

Systems with mobile roof seen from the side

# UPPER PLATFORM COVERINGS - AS DECORATION

Upon request it is possible to install special coverings on the upper platform. These coverings are available in different materials and configurations so that they can adapt to the existing floor.



#### Gravel covering



Synthetic stone covering (3 cm thick)



Gravel-plants covering



Wooden covering



Rubber covering in stone structure (3 cm thick)



Greenery

# SERVICES TO BE PROVIDED BY THE CUSTOMER AND PLANNING INDICATIONS

During the planning phase please observe and comply with the following notes!

#### SERVICES TO BE PROVIDED BY THE CUSTOMER

### Safety fences

Safety fences acc. to DIN EN ISO 13857 must be provided by the customer.

#### Parking spaces' numeration

For the allocation of the parking spaces we suggest our customers to numerate the parking spaces.

#### Noise abatement measures

The compliance with these measures must be carried out by the customer acc. to norm DIN 4109: "Sound insulation in building construction".

#### Lighting

To be carried out by the customer acc. to DIN 67528: "Lighting for parking areas and indoor car parks".

#### Pit-foundation

To be carried out by the customer acc. to the specifications in this brochure.

#### Electrical installation

Prior to starting the assembly the customer must provide a lockable main control switch out of the system/pit and close to the power unit. Electrical services to be provided by the customer acc. to this brochure's spec.

#### Installation requirements

The compliance with installation requirements acc. to quotation.

#### Drainage

Drainage channel 10 cm x 10 cm with collecting pit 50 cm x 50 cm x 20 cm acc. to this brochure's spec to be carried out by the customer.

#### Fire protection

The customer must agree upon the fire protection requirements and the required measures with the local fire department and realise them.

#### Marking

The customer must provide a 10 cm wide yellow-black marking on the front pit edge according to the norm ISO 3864.

#### Wall openings

In case of partition walls the customer must realise a 10 cm x 10 cm wall opening for hosting hydraulic and electrical cables.

#### **Building permit**

The customer must apply for and get the required permits in order to allow the installation of the parking system.

#### Control unit

The customer must make sure that a plan surface of (L x W) 50 cm x 20 cm for the installation of the control unit is directly close to the power unit and out of the platforms' moving area.

#### PLANNING INDICATIONS

Parking space width and driving lanes While planning the parking space and driving lane dimensions please observe and comply with the local/national prescriptions for the Garages' construction. For more parking comfort we suggest you to plan parking spaces of at least 250 cm width.

#### Group of users

Our parking systems are conceived for a permanent and instructed group of users.

#### Maintenance and care

We suggest a timely conclusion of a maintenance agreement.

We suggest also to perform maintainance, care and cleaning at regular time intervals.

### EG-Machinery directive

Our parking systems comply with the EG-Machinery directive and are CE certified according to the norm DIN EN 14010.

#### Ramps' inclination

Ramps leading to garages shall not have more than 15% inclination.

#### Modifications

The company Nussbaum Parking GmbH reserves the right to make dimensional, design and technical modifications.