

**60-78  
REGENT ST  
REDFERN**

**RESPONSE TO  
SUBMISSIONS  
-ADDITIONAL  
INFORMATION**

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**FOR IGLU STUDENT ACCOMMODATION  
DOCUMENT NO. S11798**

**05 MAY 2015**

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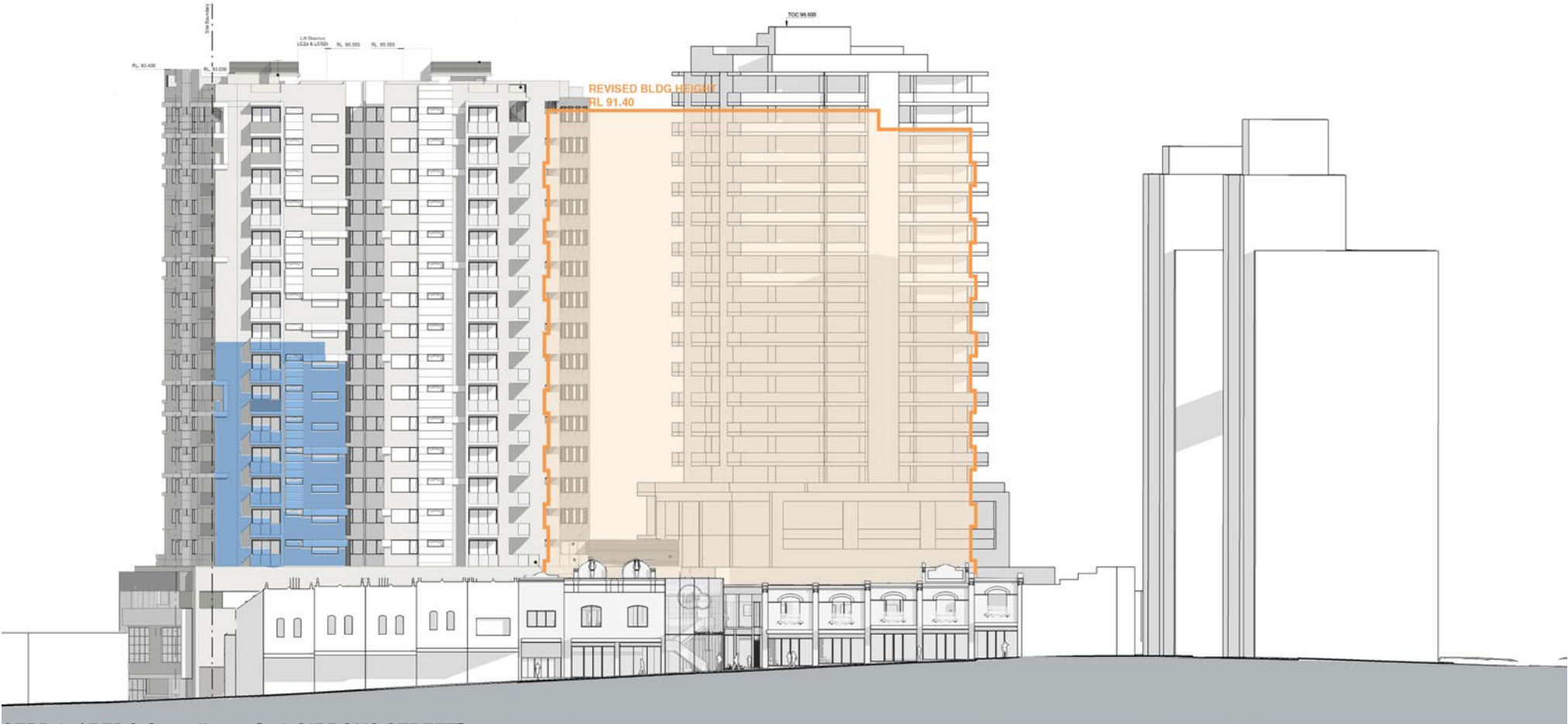
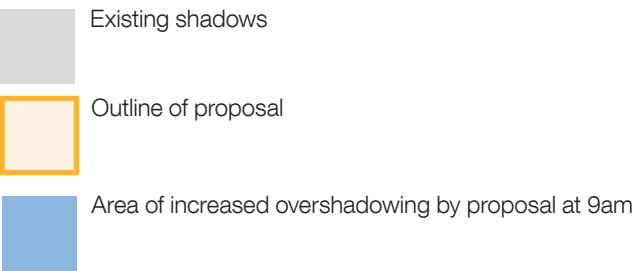
**BATESSMART<sup>TM</sup>**

1.1.1 ELEVATIONAL OVERSHADOWING STUDIES - IMPACT ON 7-9 GIBBONS STREET & 157 REDFERN STREET

WINTER SOLSTICE

Below is an elevational shadow analysis at midwinter at 9am .  
The diagram shows only 7-9 Gibbons Street is affected.

Note: At 9.20am the overshadowing impact is no longer present as the shadow cast by the proposal has shifted away from the building. Hence period of affectation 20mins.



SEPP 65/ RFDC Compliance [7-9 GIBBONS STREET]

There are 15 residential levels and 135 apartments at 7-9 Gibbons Street residential building. 90 apartments face west and receive 2 hours of daylight access at the winter solstice. In the assessment of the S75W application for this building, it was assumed that no east-facing apartments would receive solar access due to the future development potential of sites located on Regent Street. Based on this assumption, this scheme currently achieves 66% solar compliance, which is below the minimum of 70% required by SEPP65.

The following study demonstrates the proposal's overshadowing impact on 7-9 Gibbons St, at the winter solstice, would not alter the SEPP65 compliance outcome in relation to daylight access.

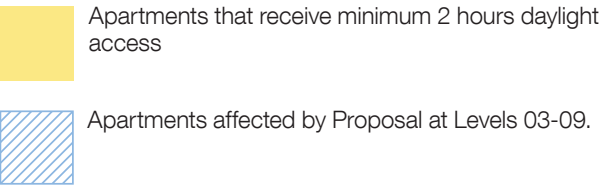
7 apartments would be subject to additional overshadowing for a period of 20mins from 9am. These are the southeast-facing apartments at lower levels that were already assumed to not receive direct sunlight.

7-9 GIBBONS STREET SEPP65 DAYLIGHT ACCESS ASSESSMENT (WINTER SOLSTICE)

LEVEL*	APARTMENT									
	A	B	C	D	E	F	G	H	J	
17	✗	✓	✓	✓	✓	✓	✓	✓	✗	
16	✗	✓	✓	✓	✓	✓	✓	✓	✗	
15	✗	✓	✓	✓	✓	✓	✓	✗	✗	
14	✗	✓	✓	✓	✓	✓	✓	✗	✗	
13	✗	✓	✓	✓	✓	✓	✓	✗	✗	
12	✗	✓	✓	✓	✓	✓	✓	✗	✗	
11	✗	✓	✓	✓	✓	✓	✓	✗	✗	
10	✗	✓	✓	✓	✓	✓	✓	✗	✗	
9	✗	✓	✓	✓	✓	✓	✓	✗	✗	
8	✗	✓	✓	✓	✓	✓	✓	✗	✗	
7	✗	✓	✓	✓	✓	✓	✓	✗	✗	
6	✗	✓	✓	✓	✓	✓	✓	✗	✗	
5	✗	✓	✓	✓	✓	✓	✓	✗	✗	
4	✗	✓	✓	✓	✓	✓	✓	✗	✗	
3	✗	✓	✓	✓	✓	✓	✓	✗	✗	

\* Residential levels

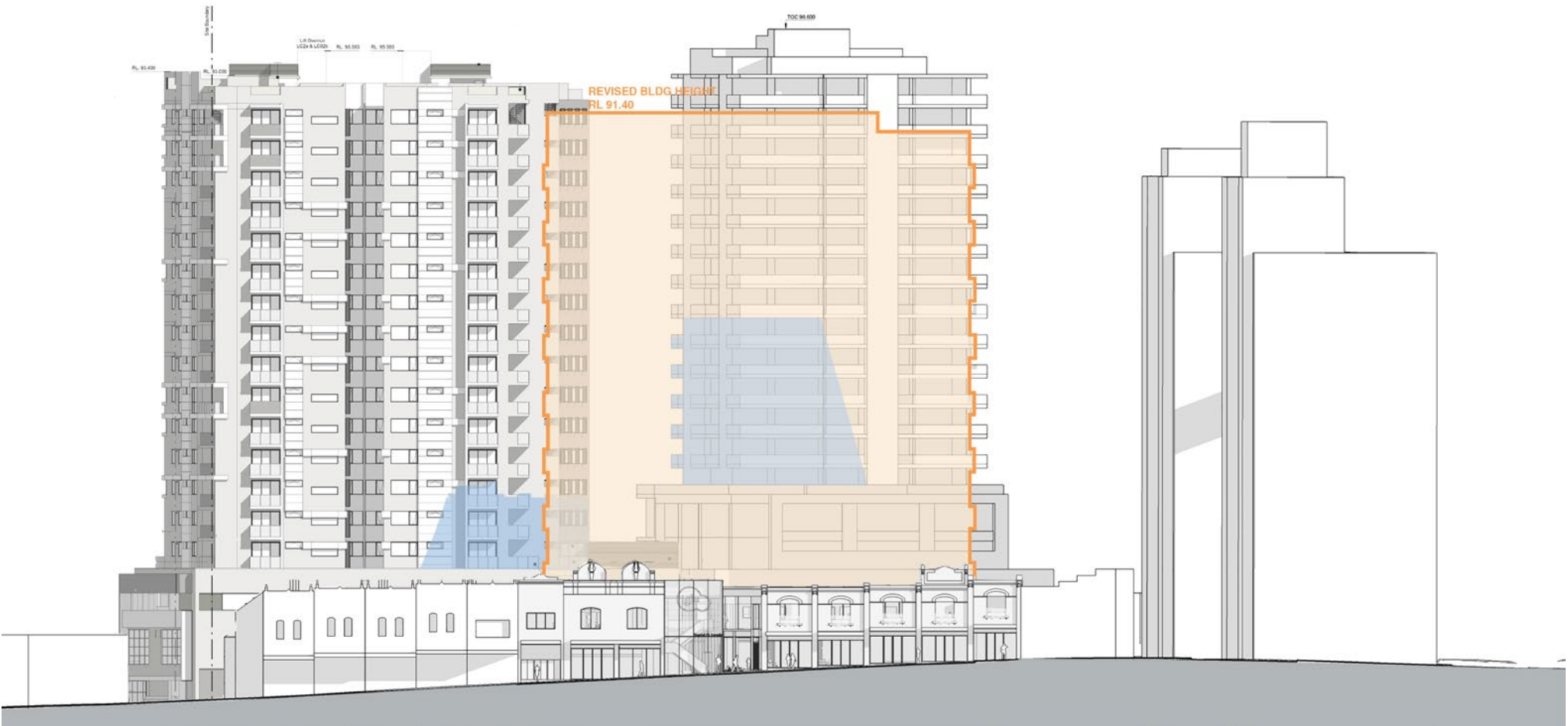
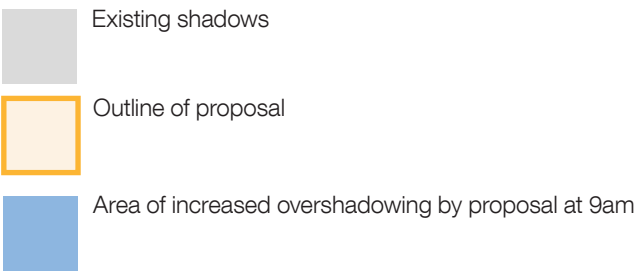
- ✓ Units that receive 2 hours of daylight access
- ✗ Units that do not receive 2 hours of daylight access
- Units overshadowed by proposal



1.1.2 ELEVATIONAL OVERSHADOWING  
STUDIES - IMPACT ON 7-9 GIBBONS STREET  
& 157 REDFERN STREET

SUMMER SOLSTICE

Below is an elevational shadow analysis at the summer solstice at 9am .  
This diagram shows both adjacent buildings are affected.



DAYLIGHT ACCESS ASSESSMENT SUMMER SOLSTICE  
[7-9 GIBBONS STREET]

There are 15 residential levels and 135 apartments at 7-9 Gibbons Street residential building.  
The following study demonstrates the proposal's overshadowing impact on 7-9 Gibbons Streets' daylight access at the summer solstice.

The proposal would impact on 6 apartments' daylight access between 9am-9.30am.

Note: At 9.30am the overshadowing impact is no longer present as the shadow cast by the proposal has shifted away from the building.  
Hence period of affectation is 30mins.

7-9 GIBBONS STREET DAYLIGHT ACCESS ASSESSMENT (SUMMER SOLSTICE)

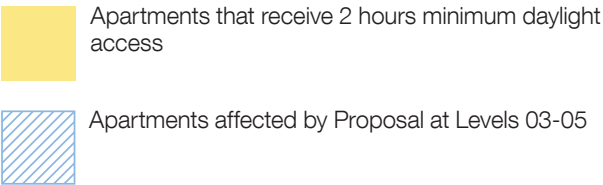
LEVEL*	APARTMENT								
	A	B	C	D	E	F	G	H	J
17	✗	✓	✓	✓	✓	✓	✓	✓	✗
16	✗	✓	✓	✓	✓	✓	✓	✓	✗
15	✗	✓	✓	✓	✓	✓	✓	✓	✗
14	✗	✓	✓	✓	✓	✓	✓	✓	✗
13	✗	✓	✓	✓	✓	✓	✓	✓	✗
12	✗	✓	✓	✓	✓	✓	✓	✓	✗
11	✗	✓	✓	✓	✓	✓	✓	✓	✗
10	✗	✓	✓	✓	✓	✓	✓	✓	✗
9	✗	✓	✓	✓	✓	✓	✓	✓	✗
8	✗	✓	✓	✓	✓	✓	✓	✓	✗
7	✗	✓	✓	✓	✓	✓	✓	✓	✗
6	✗	✓	✓	✓	✓	✓	✓	✓	✗
5	✗	✓	✓	✓	✓	✓	✓	✓	✗
4	✗	✓	✓	✓	✓	✓	✓	✓	✗
3	✗	✓	✓	✓	✓	✓	✓	✓	✗

\* Residential levels

✓ Units that receive 2 hours of daylight access

✗ Units that do not receive 2 hours of daylight access

Units overshadowed by proposal



DAYLIGHT ACCESS ASSESSMENT SUMMER SOLSTICE  
[157 REDFERN STREET]

There are 14 residential levels and 84 apartments at 157 Redfern St. 56 apartments face north or west and receive 2 hours of daylight access at the summer solstice.

The following study demonstrates the proposal's overshadowing impact on 157 Redfern Street's at the equinox. The proposal would impact on 11 apartments' daylight access between 9am-10:15am. Those apartments affected by proposal face east or southeast and are apartments that have restricted daylight access due to their orientation.

Note: At 10:15am the overshadowing impact is no longer present as the shadow cast by the proposal has shifted away from the building. Hence period of affectation is 75mins.

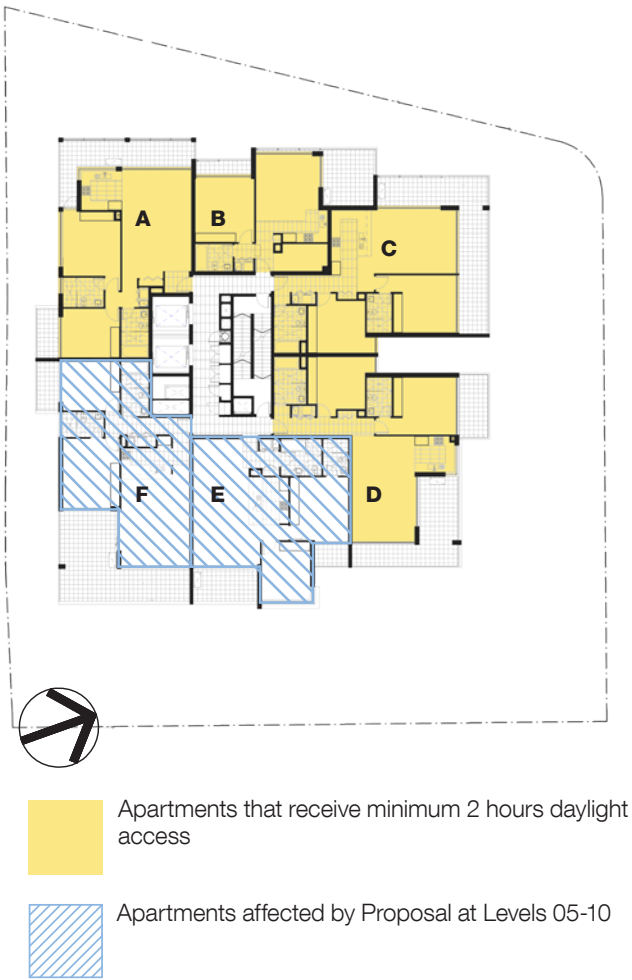
157 REDFERN STREET DAYLIGHT ACCESS ASSESSMENT (SUMMER SOLSTICE)

LEVEL*	APARTMENT					
	A	B	C	D	E	F
18	✓	✓	✓	✓	✗	✗
17	✓	✓	✓	✓	✗	✗
16	✓	✓	✓	✓	✗	✗
15	✓	✓	✓	✓	✗	✗
14	✓	✓	✓	✓	✗	✗
13	✓	✓	✓	✓	✗	✗
12	✓	✓	✓	✓	✗	✗
11	✓	✓	✓	✓	✗	✗
10	✓	✓	✓	✓	✗	✗
9	✓	✓	✓	✓	✗	✗
8	✓	✓	✓	✓	✗	✗
7	✓	✓	✓	✓	✗	✗
6	✓	✓	✓	✓	✗	✗
5	✓	✓	✓	✓	✗	✗

- \* Residential levels
- ✓

Units that receive 2 hours of daylight access
- ✗

Units that do not receive 2 hours of daylight access
- Units overshadowed by proposal

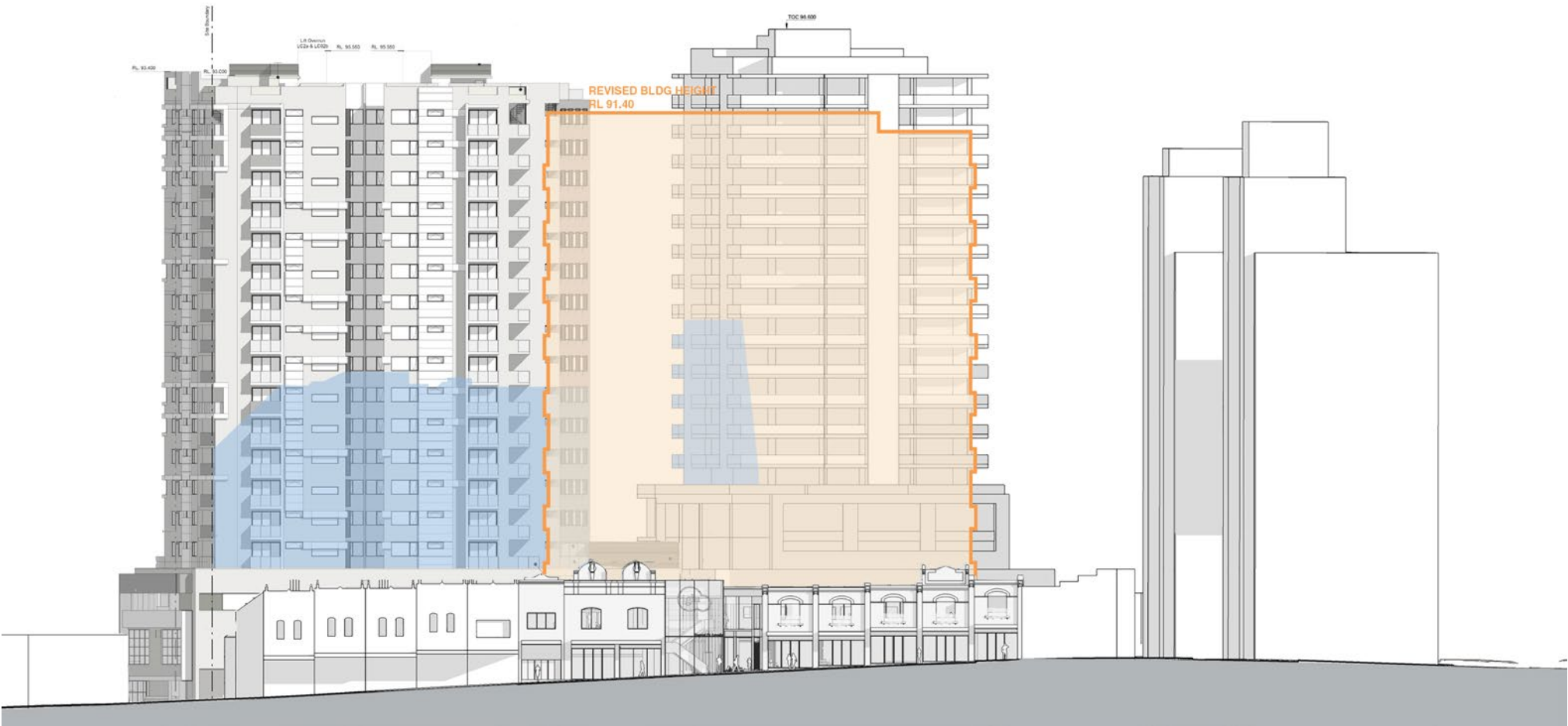
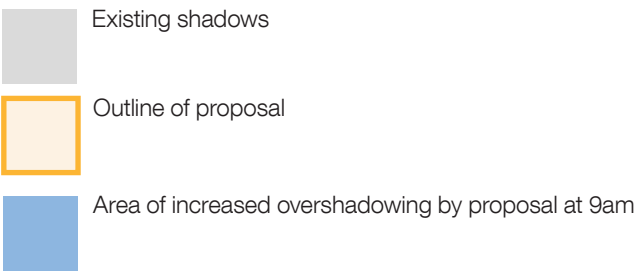




1.1.3 ELEVATIONAL OVERSHADOWING STUDIES - IMPACT ON 7-9 GIBBONS STREET & 157 REDFERN STREET

EQUINOX

Below is an elevational shadow analysis at the equinox at 9am. This diagram shows both adjacent buildings are affected.



DAYLIGHT ACCESS ASSESSMENT EQUINOX [7-9 GIBBONS STREET]

There are 15 residential levels and 135 apartments at 7-9 Gibbons Street residential building.

The following study demonstrates the proposal's overshadowing impact on 7-9 Gibbons Streets' daylight access at the equinox.

The proposal would impact on 18 apartments' daylight access between 9am-9.45am. The apartments affected would not receive 2 hours daylight regardless of the proposals impact.

Note: At 9.45am the overshadowing impact is no longer present as the shadow cast by the proposal has shifted away from the building. Hence period of affectation is 45mins.

7-9 GIBBONS STREET DAYLIGHT ACCESS ASSESSMENT (EQUINOX)

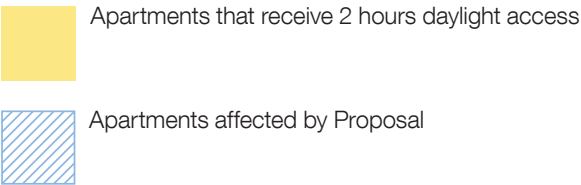
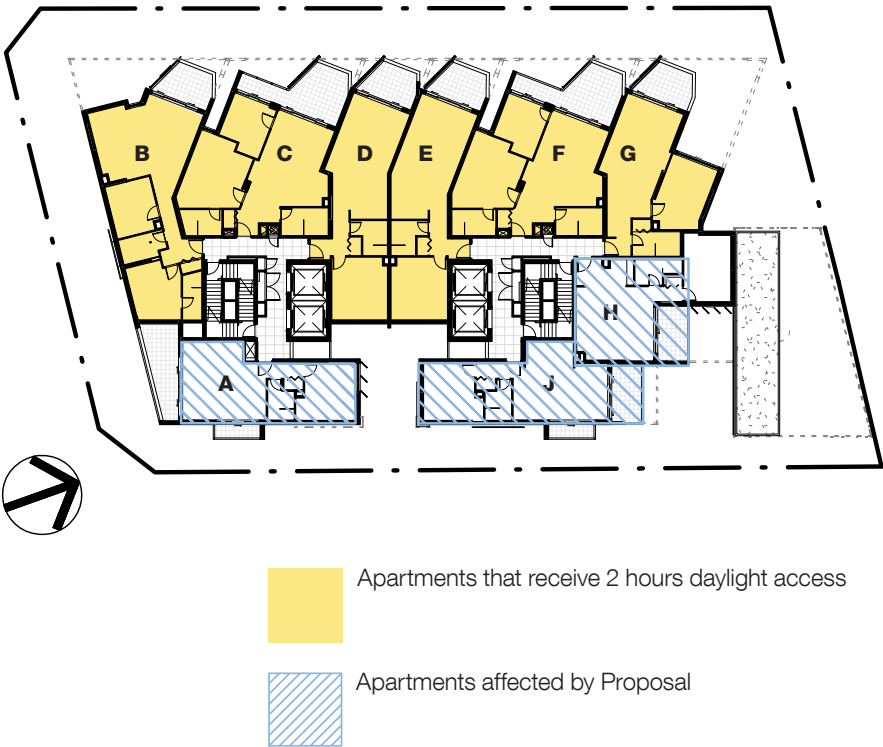
LEVEL*	APARTMENT									
	A	B	C	D	E	F	G	H	J	
17	✗	✓	✓	✓	✓	✓	✓	✓	✗	
16	✗	✓	✓	✓	✓	✓	✓	✓	✗	
15	✗	✓	✓	✓	✓	✓	✓	✓	✗	
14	✗	✓	✓	✓	✓	✓	✓	✓	✗	
13	✗	✓	✓	✓	✓	✓	✓	✓	✗	
12	✗	✓	✓	✓	✓	✓	✓	✗	✗	
11	✗	✓	✓	✓	✓	✓	✓	✗	✗	
10	✗	✓	✓	✓	✓	✓	✓	✗	✗	
9	✗	✓	✓	✓	✓	✓	✓	✗	✗	
8	✗	✓	✓	✓	✓	✓	✓	✗	✗	
7	✗	✓	✓	✓	✓	✓	✓	✗	✗	
6	✗	✓	✓	✓	✓	✓	✓	✗	✗	
5	✗	✓	✓	✓	✓	✓	✓	✗	✗	
4	✗	✓	✓	✓	✓	✓	✓	✗	✗	
3	✗	✓	✓	✓	✓	✓	✓	✗	✗	

\* Residential levels

✓ Units that receive 2 hours of daylight access

✗ Units that do not receive 2 hours of daylight access

Units overshadowed by proposal



DAYLIGHT ACCESS ASSESSMENT EQUINOX  
[157 REDFREN STREET]

There are 14 residential levels and 84 apartments at 157 Redfern Street. 82 apartments face north-west and receive 2 hours of daylight access at the summer solstice. In the assessment of

There are 14 residential levels and 84 apartments at 157 Redfern St. 56 apartments face north or west and receive 2 hours of daylight access at the equinox.

The following study demonstrates the proposal's overshadowing impact on 157 Redfern Street's at the equinox. The proposal would impact on 6 apartments' daylight access between 9am-9.30am Those apartments affected by proposal face east or southeast and are apartments that have restricted daylight access due to their orientation.

Note: At 9.30am the overshadowing impact is no longer present as the shadow cast by the proposal has shifted away from the building. Hence period of affectation is 30mins.

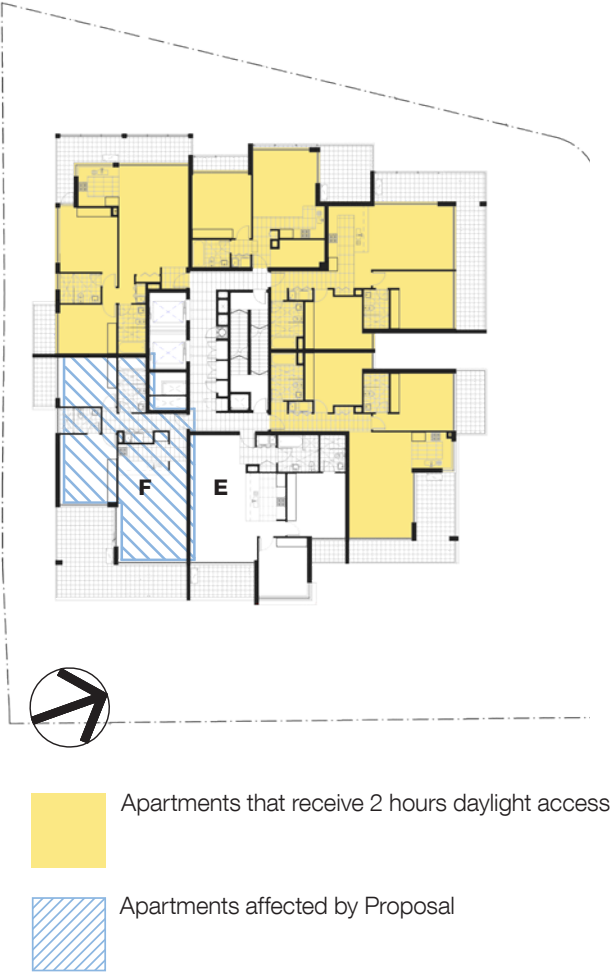
157 REDFERN STREET DAYLIGHT ACCESS ASSESSMENT (EQUINOX)

LEVEL*	APARTMENT					
	A	B	C	D	E	F
18	✓	✓	✓	✓	✗	✗
17	✓	✓	✓	✓	✗	✗
16	✓	✓	✓	✓	✗	✗
15	✓	✓	✓	✓	✗	✗
14	✓	✓	✓	✓	✗	✗
13	✓	✓	✓	✓	✗	✗
12	✓	✓	✓	✓	✗	✗
11	✓	✓	✓	✓	✗	✗
10	✓	✓	✓	✓	✗	✗
9	✓	✓	✓	✓	✗	✗
8	✓	✓	✓	✓	✗	✗
7	✓	✓	✓	✓	✗	✗
6	✓	✓	✓	✓	✗	✗
5	✓	✓	✓	✓	✗	✗

- \* Residential levels
- ✓

Units that receive 2 hours of daylight access
- ✗

Units that do not receive 2 hours of daylight access
- Units overshadowed by proposal



1.2 ELEVATIONAL OVERSHADOWING STUDIES  
- IMPACT ON 135-141 REGENT ST

Below is an elevational shadow analysis at midwinter at 12pm highlighting the impact by the proposed student accommodation building on property at 135-141 Regent Street. As described below there is minimal impact on the property at 135-141 Regent Street.

Note: The overshadowing impact on this property, as a result of the proposal, occurs between 11.45am - 12.15pm.

- Existing shadows
- Additional overshadowing Area of increased overshadowing by proposal at 12pm on the winter solstice.
- Proposed Tower footprint
- 135-141 Redfern St



June 21st 12pm- shadow diagram plan



June 21st 12pm- shadow diagram elevation



1.3.1 BUILDING SEPARATION- PODIUM

LEVEL 5, 157 REDFERN STREET

Below is a plan showing the distances to Level 5 residential roof terraces of 157 Redfern St from the proposed development.



DISTANCE FROM ADJOINING PROPERTY- LEVEL 05



1.3.2 BUILDING SEPARATION - TYPICAL LEVELS  
7-9 GIBBONS STREET & 157 REDFERN STREET

Below is a plan showing the distances to adjacent property typical level residential balconies from the proposed development.

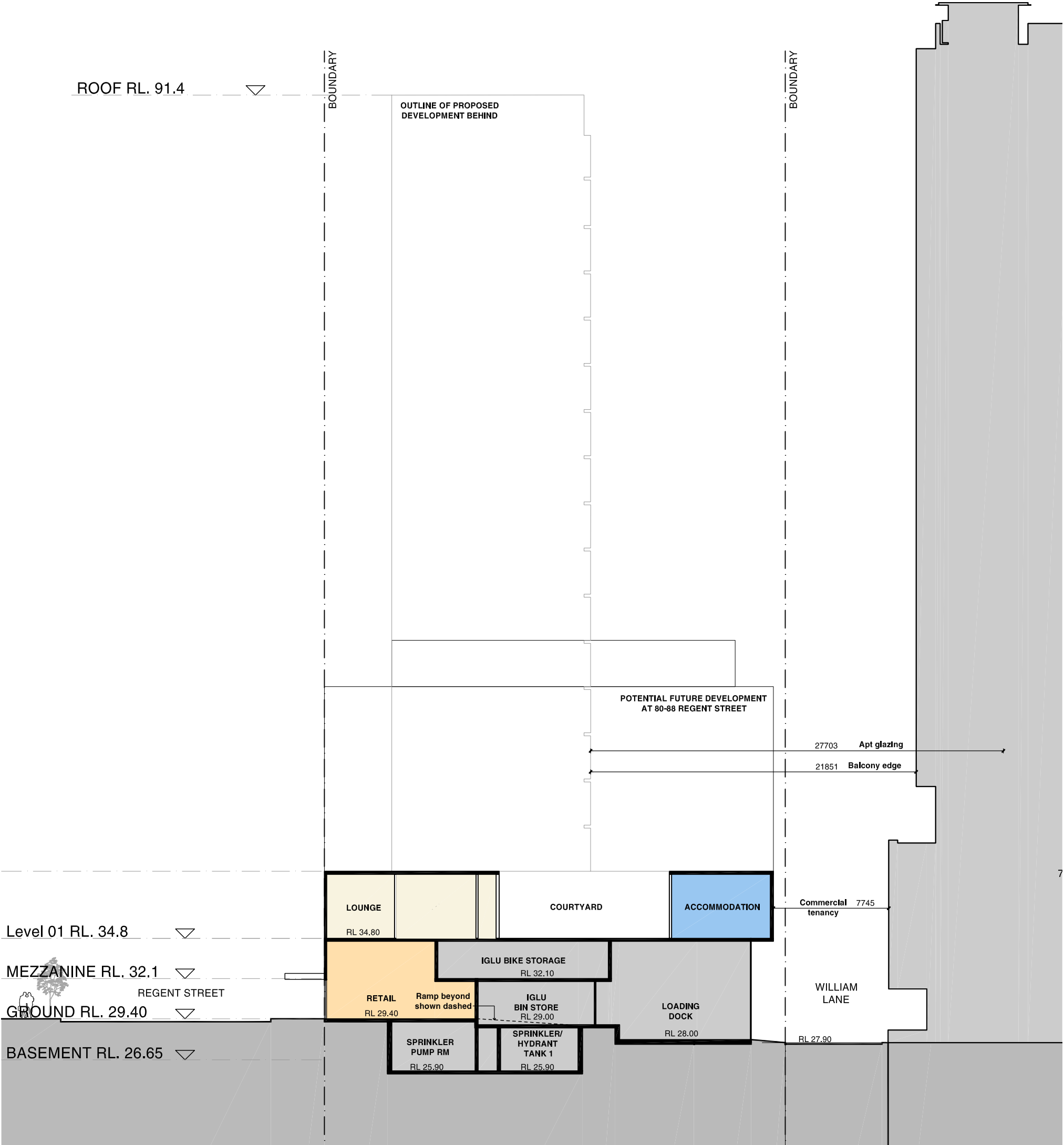
- These distances are between:
- Level 03-17 for 7-9 Gibbons Street
  - Level 06-18 for 157 Redfern Street



DISTANCE FROM ADJOINING PROPERTY- TYPICAL LEVELS

1.4 PROPOSED BASEMENT & LOADING DOCK SECTION

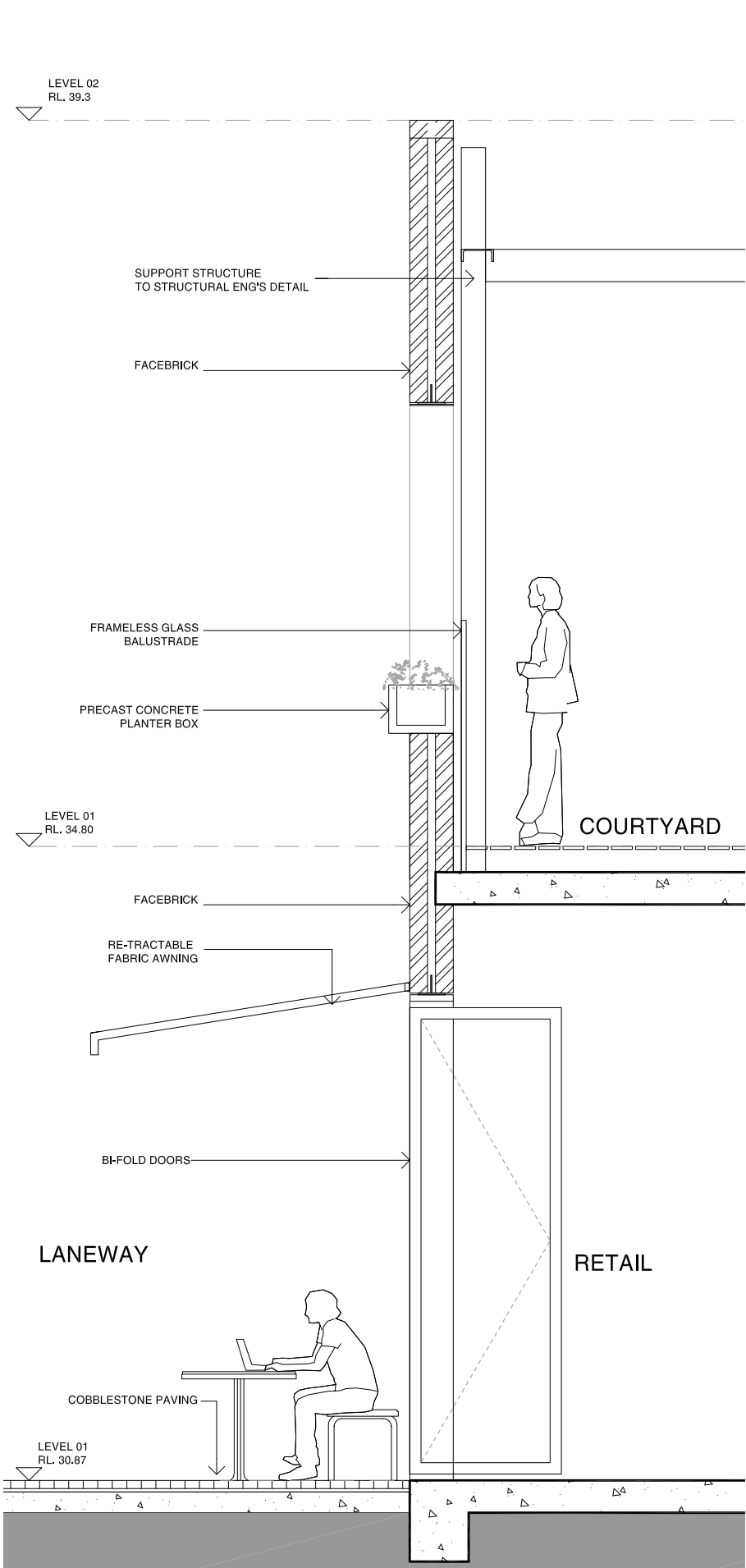
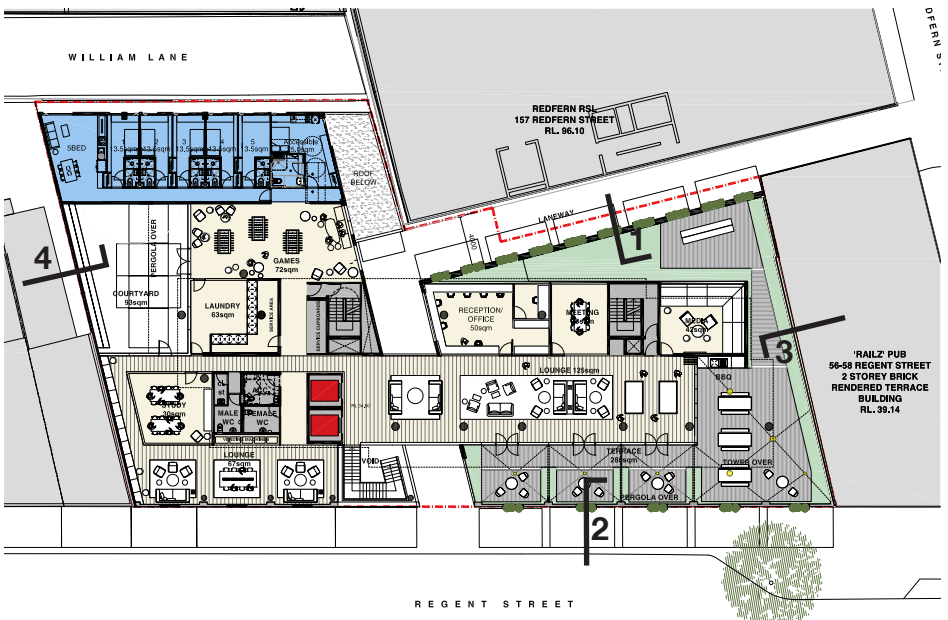
The following section shows proposed basement and loading dock and the relationship to street level.



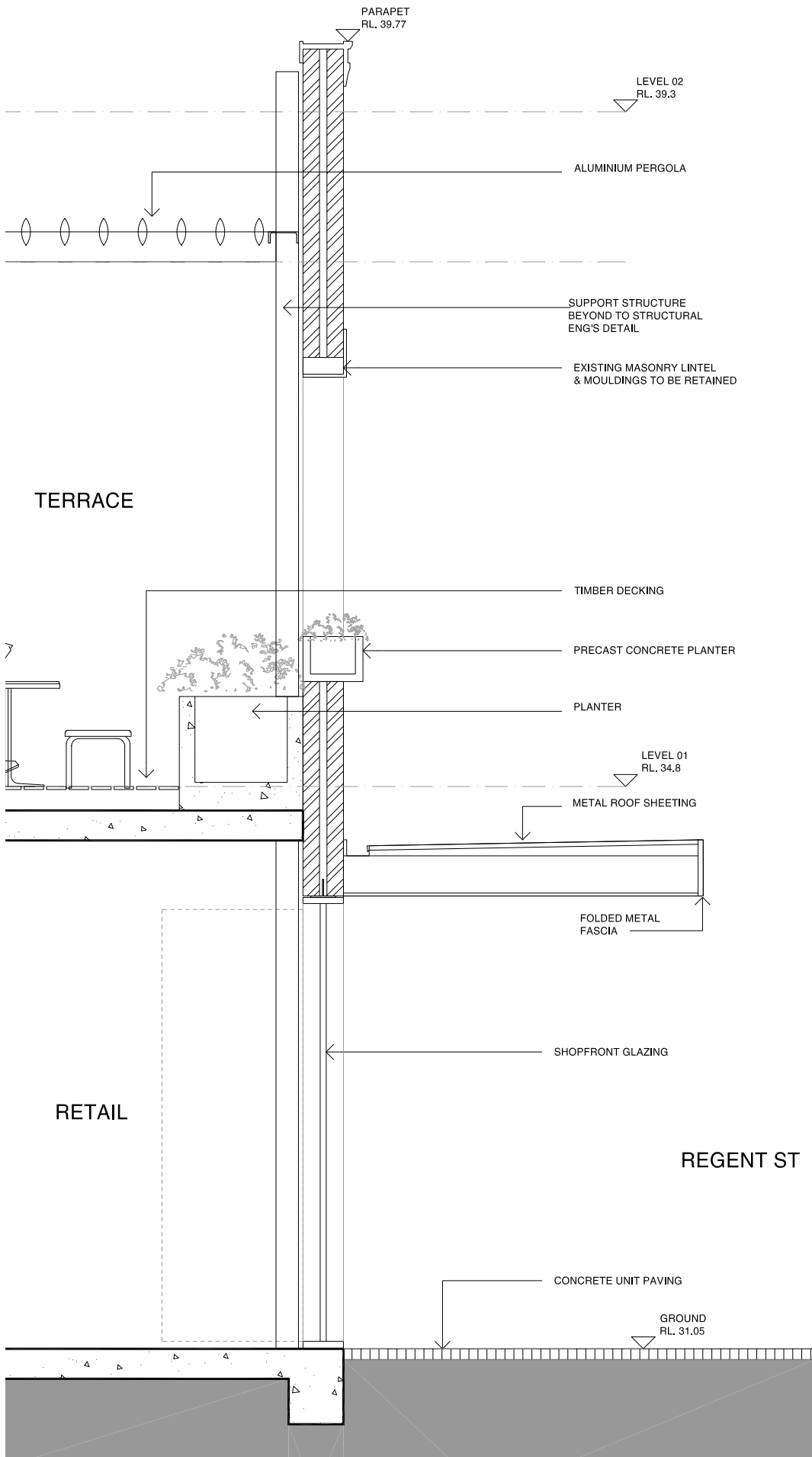
BASEMENT SECTION

1.5.1 PROPOSED WALL SECTIONS THROUGH OUTDOOR AREAS

Below are sections through the wall adjoining the laneway and through the wall along Regent Street.



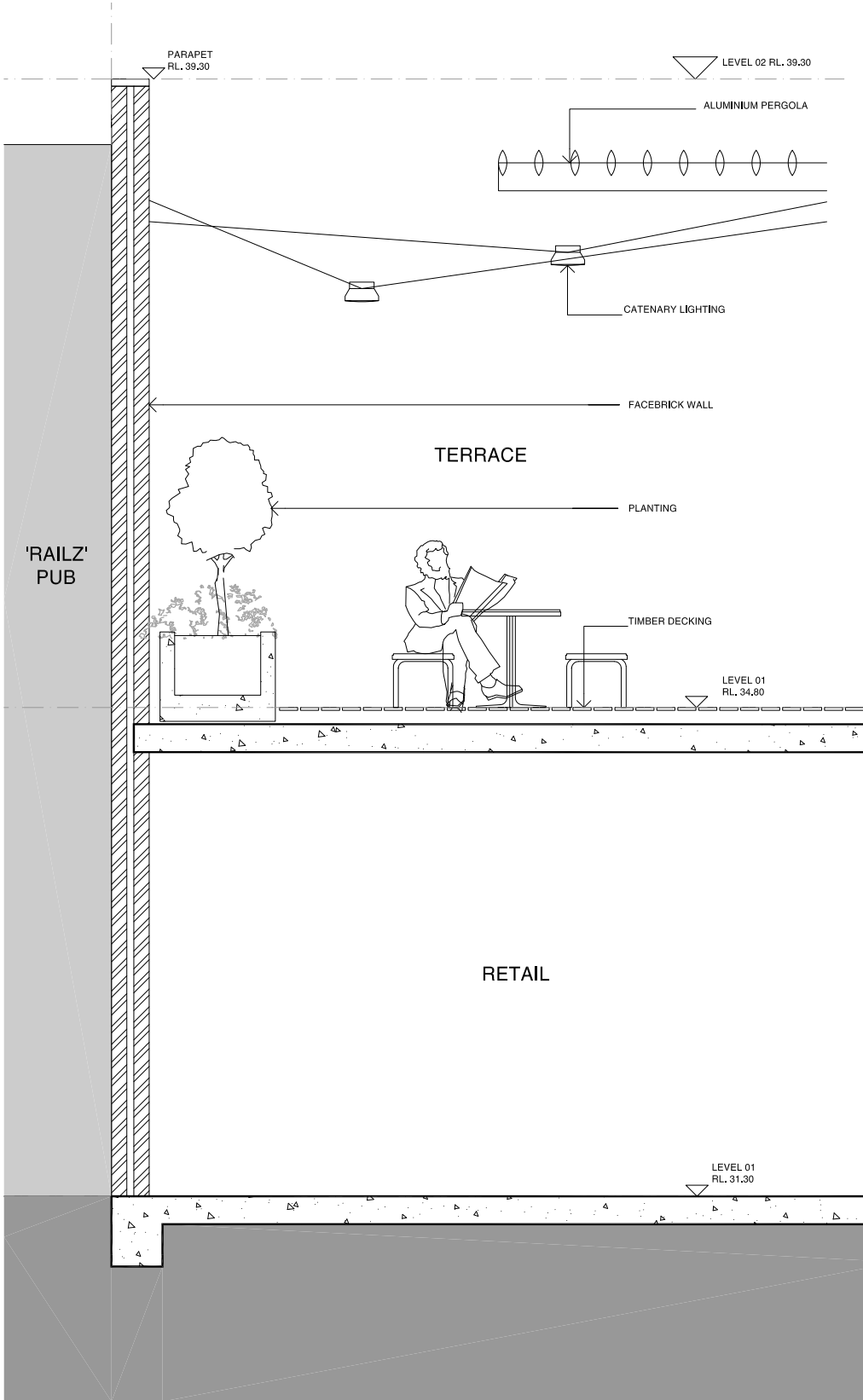
LANEWAY WALL SECTION #1



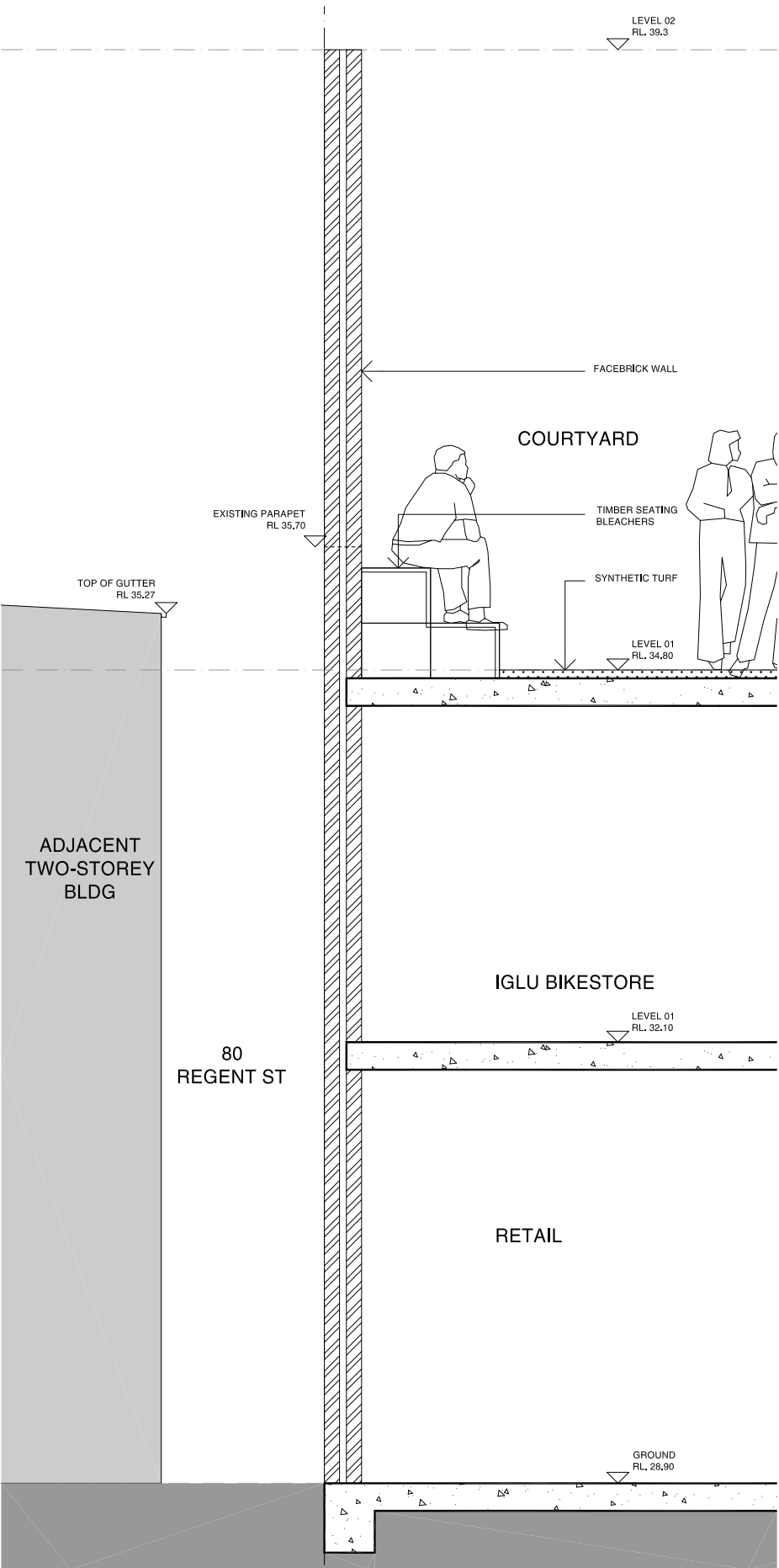
REGENT STREET WALL SECTION #2

1.5.2 WALL SECTIONS THROUGH OUTDOOR AREAS

Below are sections through the wall adjacent to 'Railz' pub and through the wall at the south boundary.



NORTH BOUNDARY WALL SECTION #3



SOUTH BOUNDARY WALL SECTION #4