

**PLANNING PROPOSAL TO PERMIT  
MIXED USE DEVELOPMENT  
EBLEY STREET, BONDI JUNCTION  
*Traffic Impact Assessment***

June 2019  
(Rev G)

Reference 15159

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## APPENDIX A      REVISED CONCEPT PLAN

## LIST OF ILLUSTRATIONS

FIGURE 1	LOCATION
FIGURE 2	SITE
FIGURE 3	ROAD NETWORK
FIGURE 4	TRAFFIC CONTROLS

## 1. INTRODUCTION

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This report has been prepared to accompany a revised Concept Plan for a Planning Proposal submitted to Waverley Council for a rezoning to permit mixed use development on a consolidated site with front to Ebley Street at Bondi Junction (Figure 1).

The site is located in the south-eastern sector of the Bondi Junction Centre and is currently zoned B3 Commercial, however Bondi Junction is well served by rail and bus services and provides an ideal location for residential apartment living as part of the urban consolidation process.

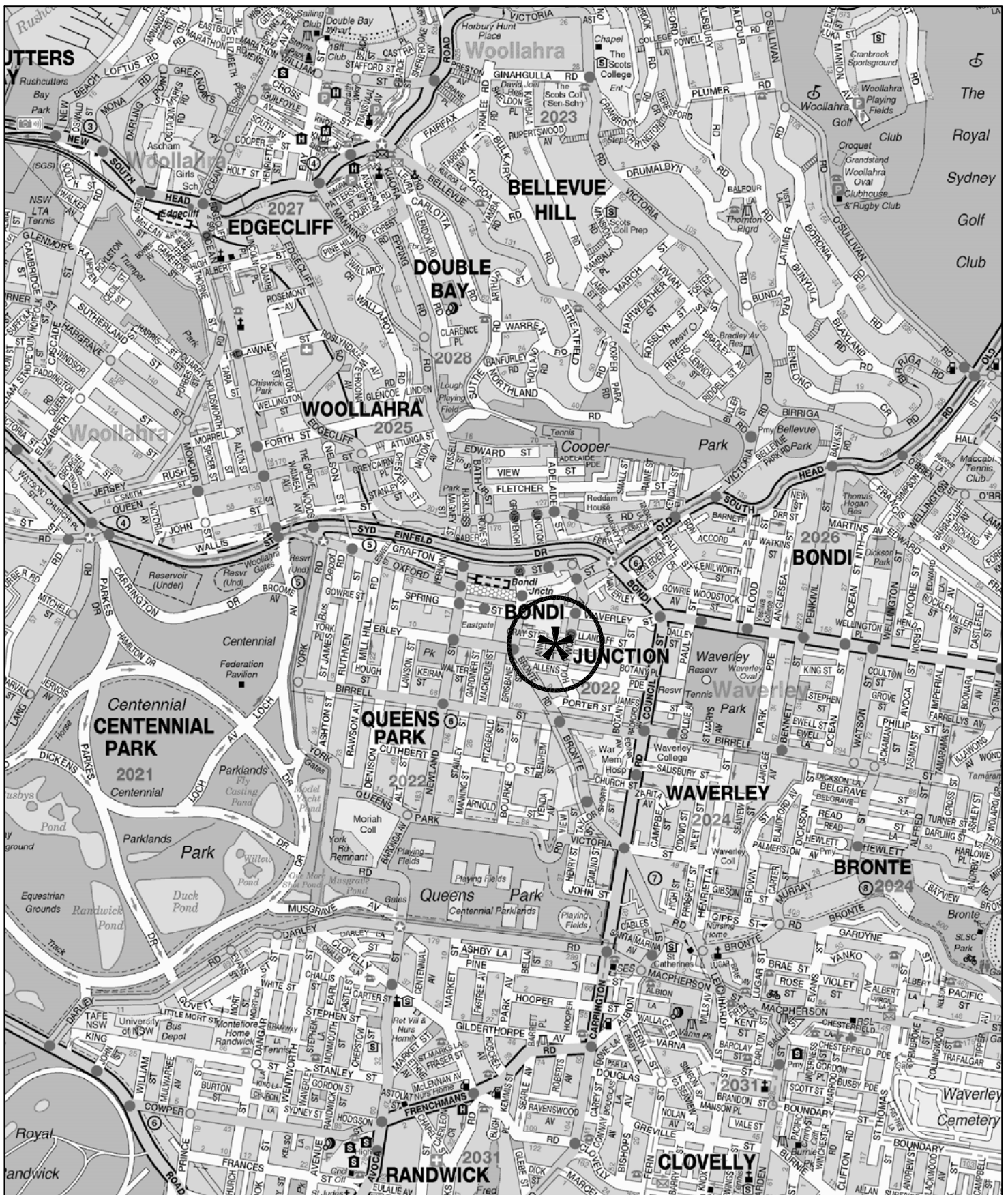
The adjoining sites to the west are zoned B4 Mixed Use and the proposal is consistent with this existing zoning.

The revised envisaged development outcome (subject to the proposed rezoning) would comprise:

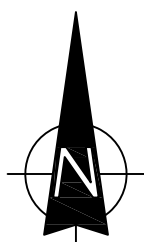
Retail	2,343.5m <sup>2</sup>
Commercial	13,766.5m <sup>2</sup>
<b>Total:</b>	<b>16,110m<sup>2</sup></b>
Residential	35 apartments

The purpose of this report is to:

- \* describe the site and the envisaged development outcome
- \* describe the road network serving the site and the prevailing traffic conditions
- \* assess the potential traffic implications
- \* assess the suitability of the envisaged vehicle access arrangements
- \* assess the envisaged parking provision



LEGEND



LOCATION

FIG 1



## 2. PLANNING PROPOSAL

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### 2.1 SITE, CONTEXT, CURRENT ZONING AND USE

The site (Figure 2) which is the subject of the Planning Proposal comprises:

#### **No. 96 – 104**

A consolidation of Lot 1 in DP733362 and Lot 1 in DP568524 occupying a total area of some 1,009m<sup>2</sup> with frontages to Hollywood Avenue and Ebley Street.

#### **No. 106 – 108**

A consolidation of SP32529 and SP22095 occupying a total area of 590m<sup>2</sup> with frontage to Ebley Street.

#### **No. 110 – 122**

Lot 6 in DP749904 which occupies an area of 1,639m<sup>2</sup> with frontages to Ebley Street and Ann Street.

There are very wide footways along the Ebley Street and Hollywood Avenue frontages of the sites. The large Westfield shopping complex extends to the north with commercial / retail uses along Ebley Street and Hollywood Avenue while there are terrace style dwellings extending to the east and flats buildings extending to the south.

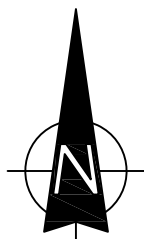
The existing buildings on the sites comprise:

	<b>(No. 96-104)</b>	<b>(No. 106-108)</b>	<b>(No. 110-122)</b>
Residential Units	-	16	-
Commercial	-	717m <sup>2</sup>	1,959m <sup>2</sup>
Education	1,540m <sup>2</sup>	-	1,641m <sup>2</sup>
Retail	-	300m <sup>2</sup>	-
Sex Industry	582m <sup>2</sup>	-	-
Parking		33 spaces	52 spaces

Vehicle accesses for the sites are located on the Ebley Street frontages.



**LEGEND**



**SITE**

**FIG 2**





## 2.2 ENVISAGED DEVELOPMENT

The existing buildings would be demolished and the sites excavated to construct new 9 level buildings over basement carparking.

The revised envisaged development outcome is compared with a development outcome under the existing LEP provisions and the previous Planning Proposal in the following:

	<b>New PP</b>	<b>Old PP</b>	<b>LEP</b>
Retail	2,343.5m <sup>2</sup>	1,623m <sup>2</sup>	4,310m <sup>2</sup>
Commercial	13,766.5m <sup>2</sup>	10,920m <sup>2</sup>	22,050m <sup>2</sup>
<b>Total:</b>	<b>16,110m<sup>2</sup></b>	<b>12,543m<sup>2</sup></b>	<b>26,360m<sup>2</sup></b>
Residential	35 apartments	39 apartments	Nil

Basement carparking would be provided with vehicle accesses either on the Ebley Street or Ann Street frontages.

The Planning Proposal could allow for land dedication of up to 4.5 metres along Ann Street. This will allow for road widening and has the potential to improve access to surrounding developments and increase the capacity of the surrounding road network.

Details of the envisaged development are provided in the revised Concept Plans prepared by X.Pace Design Group which are reproduced in Appendix A.

### 3. ROAD NETWORK AND TRAFFIC CONDITIONS

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#### 3.1 ROAD NETWORK

The road network serving the site (Figure 3) comprises:

- \* the State Road and arterial routes of Bondi Road, Old South Head Road and Syd Einfeld Drive
- \* the Centre access roads of Bronte Road and Oxford Street
- \* the Centre circulation routes of Ebley Street, Newland Street, Grafton Street and Adelaide Street/Hollywood Avenue

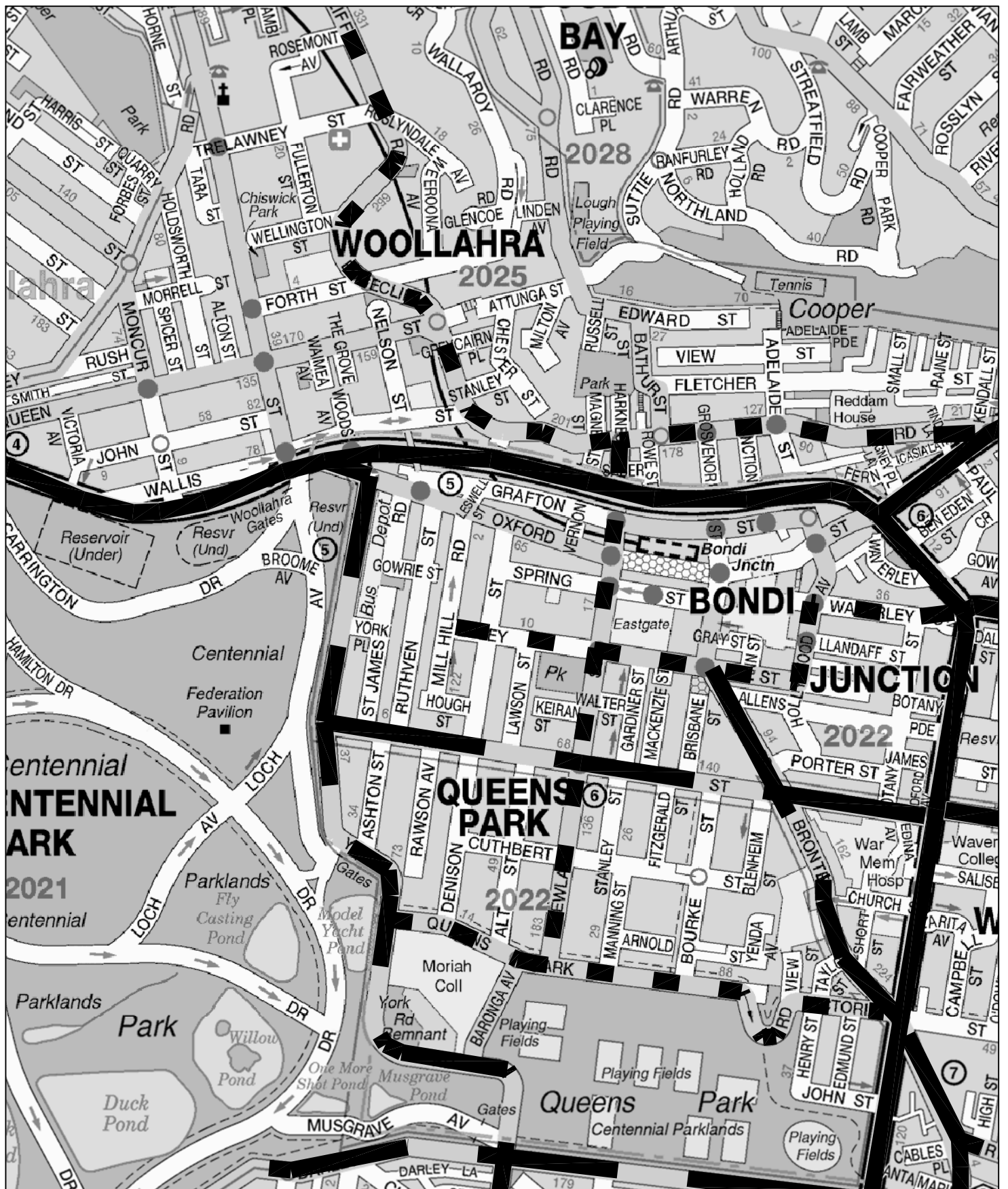
Gray Street and Ann Street are minor service lanes connecting between Bronte Road and Ebley Street. Oxford Street is closed (Oxford Mall) between Bronte Road and Newland Street and sections of Bronte Road and Oxford Street have access restrictions (Buses Only). Hollywood Avenue is closed on the southern side of Ebley Street and Ebley Street terminates to the east of Hollywood Avenue.

Ebley Street is 12.8 wide, having a straight alignment with a slight down grade towards the west.

#### 3.2 TRAFFIC CONTROLS

The traffic controls which exist on the road system in the vicinity of the site (Figure 4) comprise:

- \* the traffic signals at the Bronte Road/Ebley Street intersection
- \* the traffic signals at the Oxford Street/Bondi Road/Old South Head Road/Syd Einfeld Drive intersection
- \* the marked foot-crossing across Ebley Street located midway between Bronte Road and Hollywood Avenue (i.e. at the site frontage)
- \* the traffic signals at the Oxford Street/Hollywood Avenue/Grafton Street intersection







- \* the traffic signals at the Hollywood Avenue and Waverley Street intersection
- \* the NO STOPPING, CLEARWAY and BUS LANE restrictions in Oxford Street
- \* the ONE-WAY westerly restriction on Gray Street with left turn only at Bronte Road
- \* the STOP sign control on Ebley Street at the Hollywood Avenue intersection

### 3.3 TRAFFIC CONDITIONS

An indication of the prevailing traffic conditions in the vicinity of the site is provided by data published by RMS<sup>1</sup> and surveys undertaken as part of this study. The data published by RMS is expressed in terms of Annual Average Daily Traffic (AADT) and the most recent information reveals the following:

	<b>AADT</b>
Sydney Enfield Drive	41,898
Bondi Road	29,247
Old South Head Road	49,453

Traffic surveys have been undertaken at the Oxford Street/Hollywood Avenue/Adelaide Street and Bronte Road/Ebley Street intersections during the morning and afternoon peak periods. The results of those surveys are summarised overleaf and indicate the following peak flows at the site frontage:

	<b>AM</b>	<b>PM</b>
Ebley Street		
East Bound	504	689
West Bound	302	519

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<sup>1</sup> *Traffic Volume Data for Sydney Region  
Roads and Maritime Services*



		AM	PM
Bronte Road	NB	198	198
	RT	227	165
	LT	167	197
	SB	71	195
	RT	72	86
	LT	34	139
Ebley Street	EB	243	385
	RT	133	286
	LT	30	67
	WB	219	341
	RT	-	-
	LT	83	178
Oxford Street	EB	40	42
Oxford Street	WB	66	70
	RT	174	248
	LT	280	327
Hollywood Avenue	NB	280	233
	RT	136	229
Adelaide Street	SB	178	205
	LT	154	210

The operational performance of these intersections is quite satisfactory, however the Traffic flows in the area are largely controlled by the operation of the traffic signals at the major intersection of Oxford Street, Bondi Road and Syd Einfeld Drive.

### **3.4 TRANSPORT SERVICES**

Public transport services operating in close proximity to the development site include:

- \* the high frequency arterial bus services which operate along Bondi Road, Old South Head Road and Oxford Street
- \* Bondi Junction Railway Station located just to the west on the Eastern Line Suburbs with adjacent bus interchange

### **3.5 FUTURE CIRCUMSTANCES**

Council proposes to a number of cycle way and streetscape initiatives in the area and one associated traffic management outcome will be the prohibition of the right turn movement from Bronte Road to Ebley Street.

## 4. TRAFFIC

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The RMS guidelines (TDT-2013-4b) specify a generation rate for 'high density' residential apartments in reasonable proximity to a railway station of 0.19 vtph and 0.15 vtph per dwelling in the morning and afternoon peaks respectively. The current RMS rate for commercial floorspace is 1.6 vtph per 100m<sup>2</sup> in the morning peak and 1.2 vtph per 100m<sup>2</sup> in the afternoon peak however this is on the basis of an unconstrained parking provision of 1 space per 40m<sup>2</sup> whereas the DCP allowance is only 0.66 space per 100m<sup>2</sup>.

Similarly the RMS generation rate for retail use is based on large shopping centres with a parking provision of 5-6 spaces per 100m<sup>2</sup> whereas the DCP allowance for retail is only 2.0 spaces per 100m<sup>2</sup>.

The traffic generation rate for commercial and retail uses at Bondi Junction therefore only reflect the number of parking spaces provided as follows:

Commercial	0.6 vtph per space (AM & PM)*
Retail	2.0vtph per space PM (25% AM)

\* 60% arrive/depart in 1 hour

A comparison of the potential traffic generation for the Planning Proposal development outcome and the LEP development and old PP outcomes is provided in the following:

<b>New PP</b>	<b>AM</b>	<b>PM</b>
35 apts (@ 0.19 & 0.15)	7 vtph	5 vtph
13,766m <sup>2</sup> Commercial (90 cars)	54 vtph	54 vtph
2,343m <sup>2</sup> Retail (46 cars)	23 vtph	92 vtph
<b>Total:</b>	<b>84 vtph</b>	<b>151 vtph</b>
<b>Old PP</b>	<b>AM</b>	<b>PM</b>
39 apts (@ 0.19 & 0.15)	8 vtph	6 vtph
10,920m <sup>2</sup> Commercial (72 cars)	43 vtph	43 vtph
1,623m <sup>2</sup> Retail (32 cars)	16 vtph	64 vtph
<b>Total:</b>	<b>67 vtph</b>	<b>113 vtph</b>

**LEP**

13,650m <sup>2</sup> Commercial (90 cars)	72 vtp	72 vtp
2,810m <sup>2</sup> Retail (45 cars)	23 vtp	90 vtp
<b>Total:</b>	<b>95 vtp</b>	<b>162 vtp</b>

Thus, it is apparent that the traffic generation of the envisaged development under the new Planning Proposal will be less than that under the LEP provisions.

The actual projected “additional” traffic generation of the envisaged development will be discounted by the vehicle movements generated by the existing site development of some 51 vtp (i.e. 85 parking with 60% arrival in 1 hour).

The projected distribution of the total generated movements is as follows:

Syd Einfeld Drive/Oxford Street east (via Waverley Crescent)	50%
Bondi Road/Council Street (via Waverley Crescent)	15%
Hollywood Avenue/Grafton Street	20%
Hollywood Avenue/Ebley Street	15%

The resultant traffic movements will only be of a minor magnitude and will not present any adverse traffic capacity, safety or environmental related consequences particularly as they will be dispersed on multiple approach and departure routes (due to the nature of the traffic management measures on the road system) and discounted in relation to the existing traffic generation. The additional volumes will be of such a minor nature that they will not impact on the operational performance of the intersections in the vicinity of the site and are consistent with the traffic management, which underlies redevelopment of the area.

Besides the projected traffic generation would be somewhat less than that generated by the permitted development under the existing planning provisions.

## **5. ACCESS, INTERNAL CIRCULATION AND SERVICING**

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The envisaged vehicle access, internal circulation and servicing arrangements for the developments can and would comply with the requirements of AS2890.1, 2 and 6. Vehicle access would be located on either the Ebley Street or Ann Street frontages.

## **6. PARKING**

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The envisaged development resultant to the revised proposed rezoning will provide on-site parking which is compliant with the provisions of Council's DCP for the proposed uses. Similarly, there will also be appropriate provision for bicycle and motorcycle parking in the development outcomes.

## 7. CONCLUSION

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There is an increasing demand for residential apartment living as part of the ongoing urban consolidation in Metropolitan Centres where there are good public transport services available as well as retail, entertainment and employment facilities. The traffic, transport and parking assessment provided in this report concludes that the envisaged development resultant to the revised proposed rezoning will:

- \* not present any unsatisfactory traffic capacity, safety or environmental related implications
- \* incorporate a suitable and appropriate parking provision
- \* incorporate suitable vehicle access, internal circulation and servicing arrangements
- \* present a 'sustainable' outcome with colocation in regard to rail and bus services, retail, entertainment and commercial facilities resulting an optimum outcome in relation to reliance on private car travel

# APPENDIX A

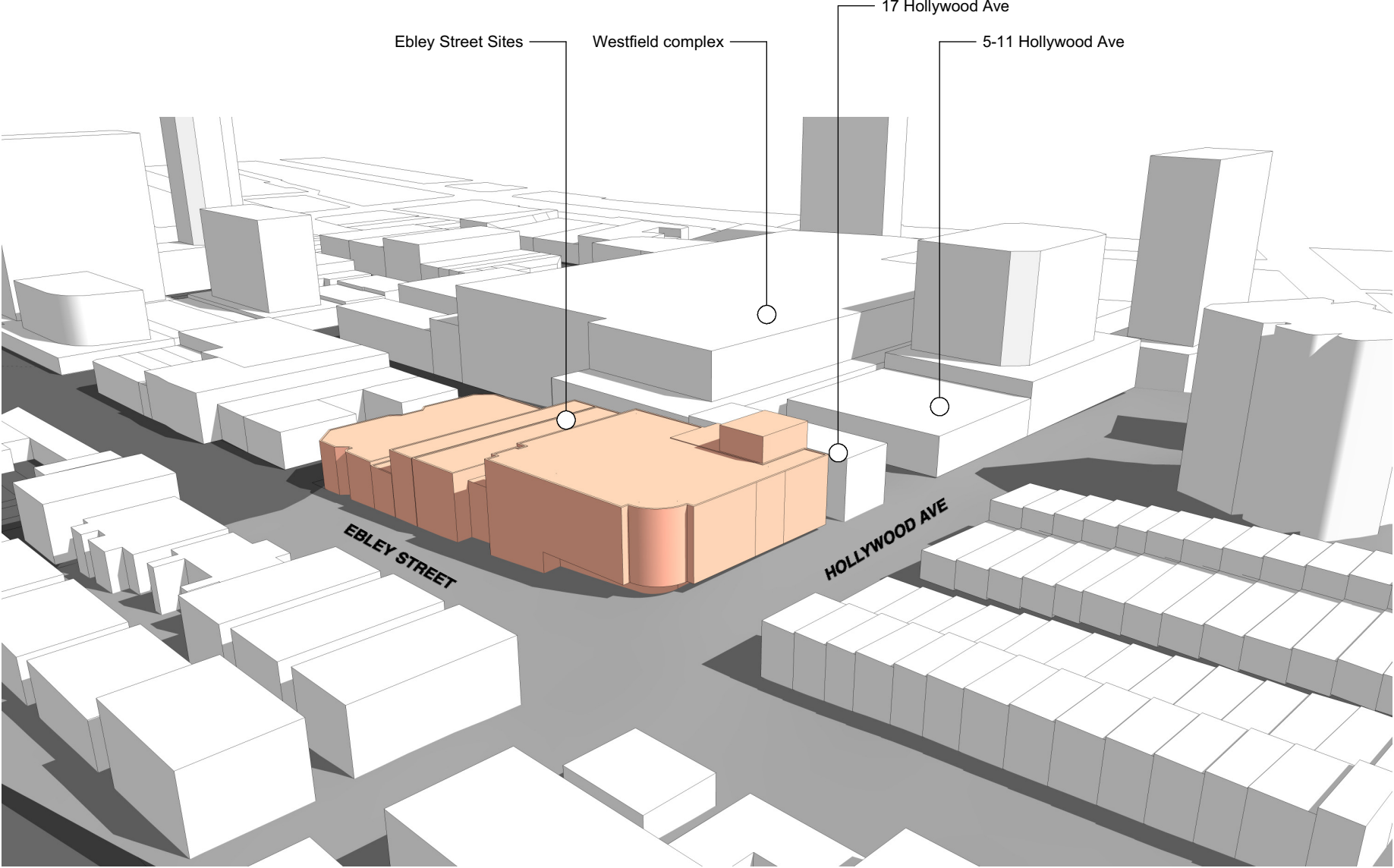
## CONCEPT PLAN

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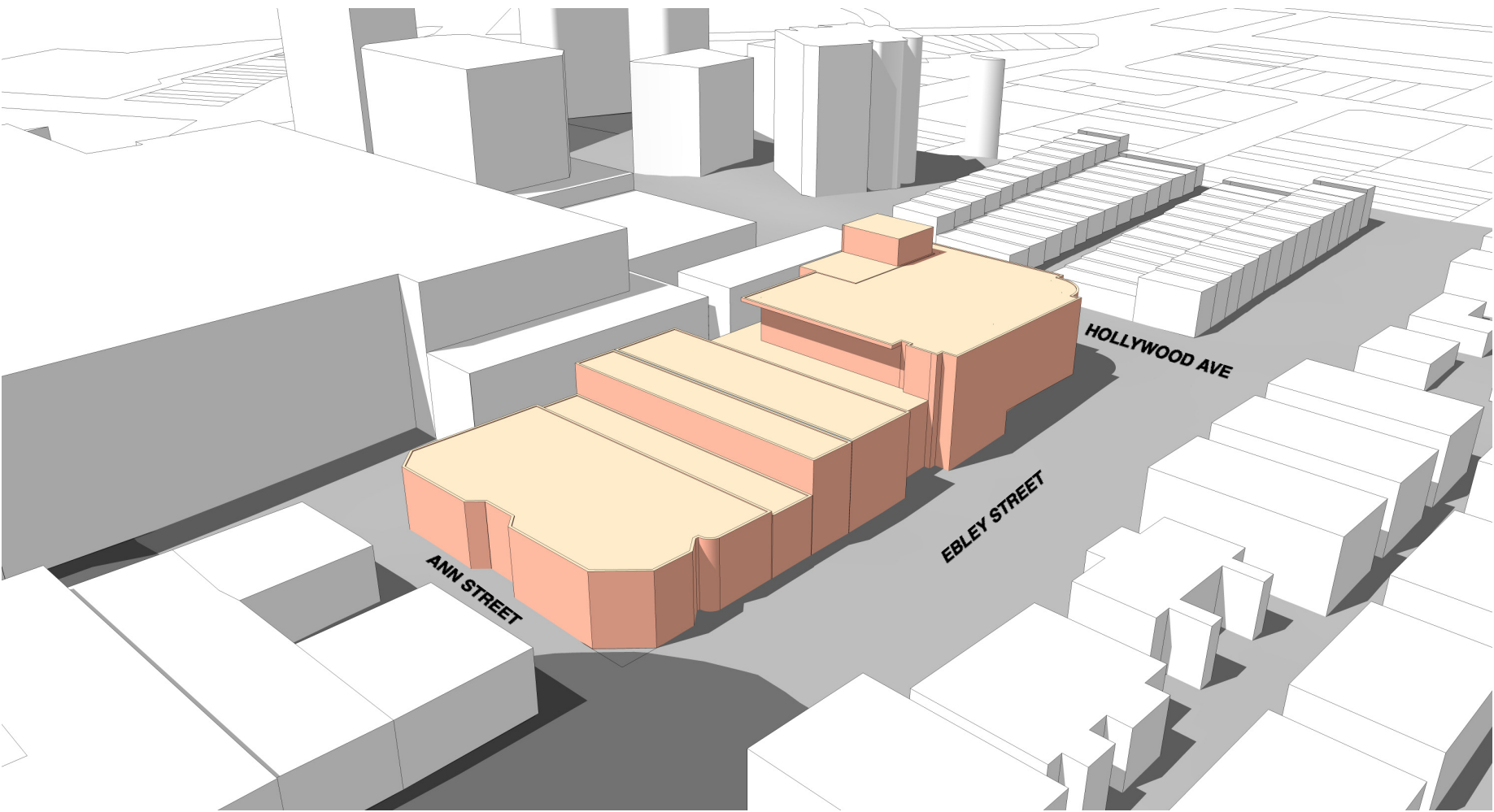


PROPOSED MODIFICATION TO PLANNING PROPOSAL

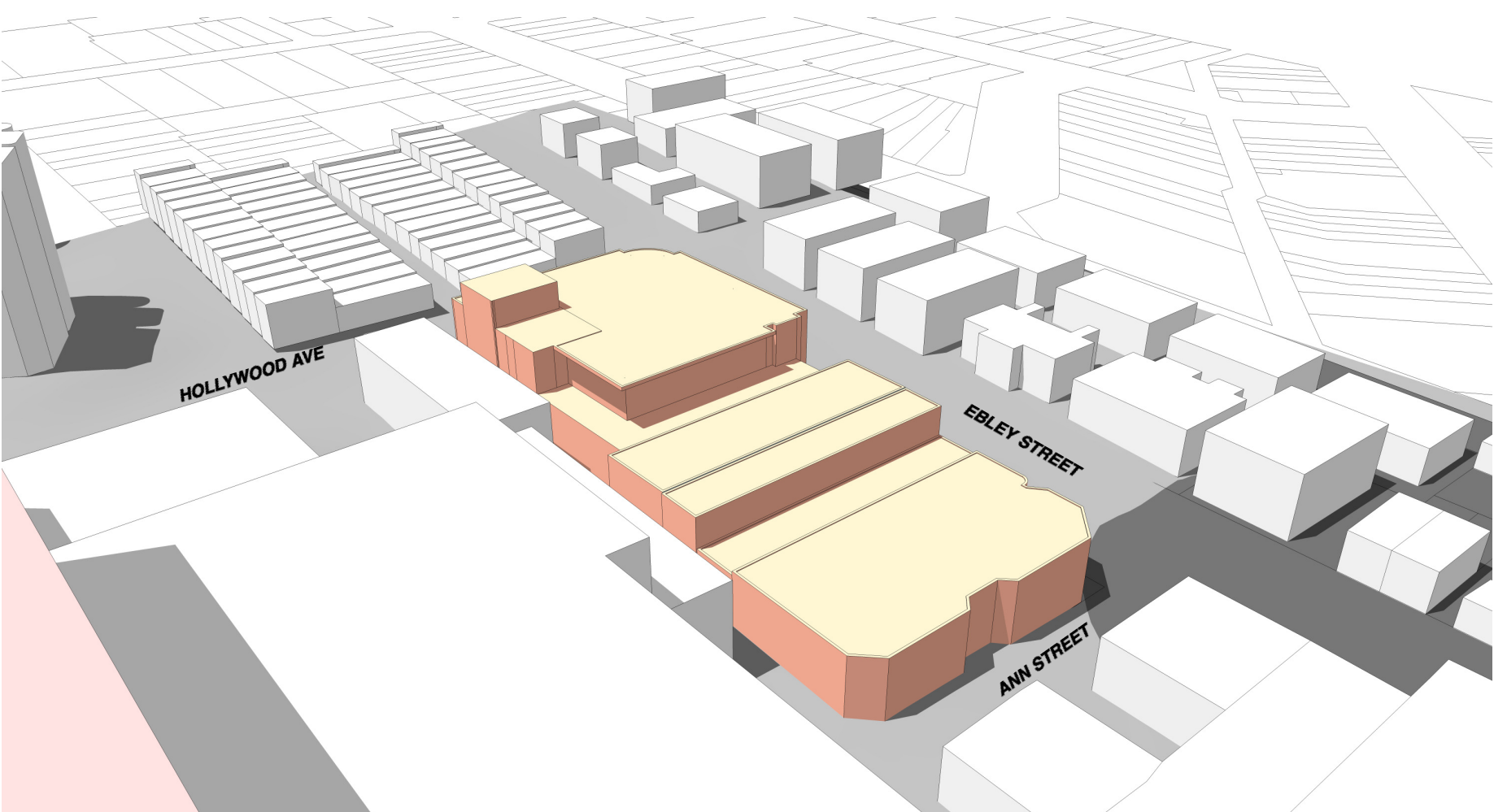
EXISTING BUILDINGS



View - Corner of Hollywood/Ebley Street



View - Corner of Ann Street/Ebley Street

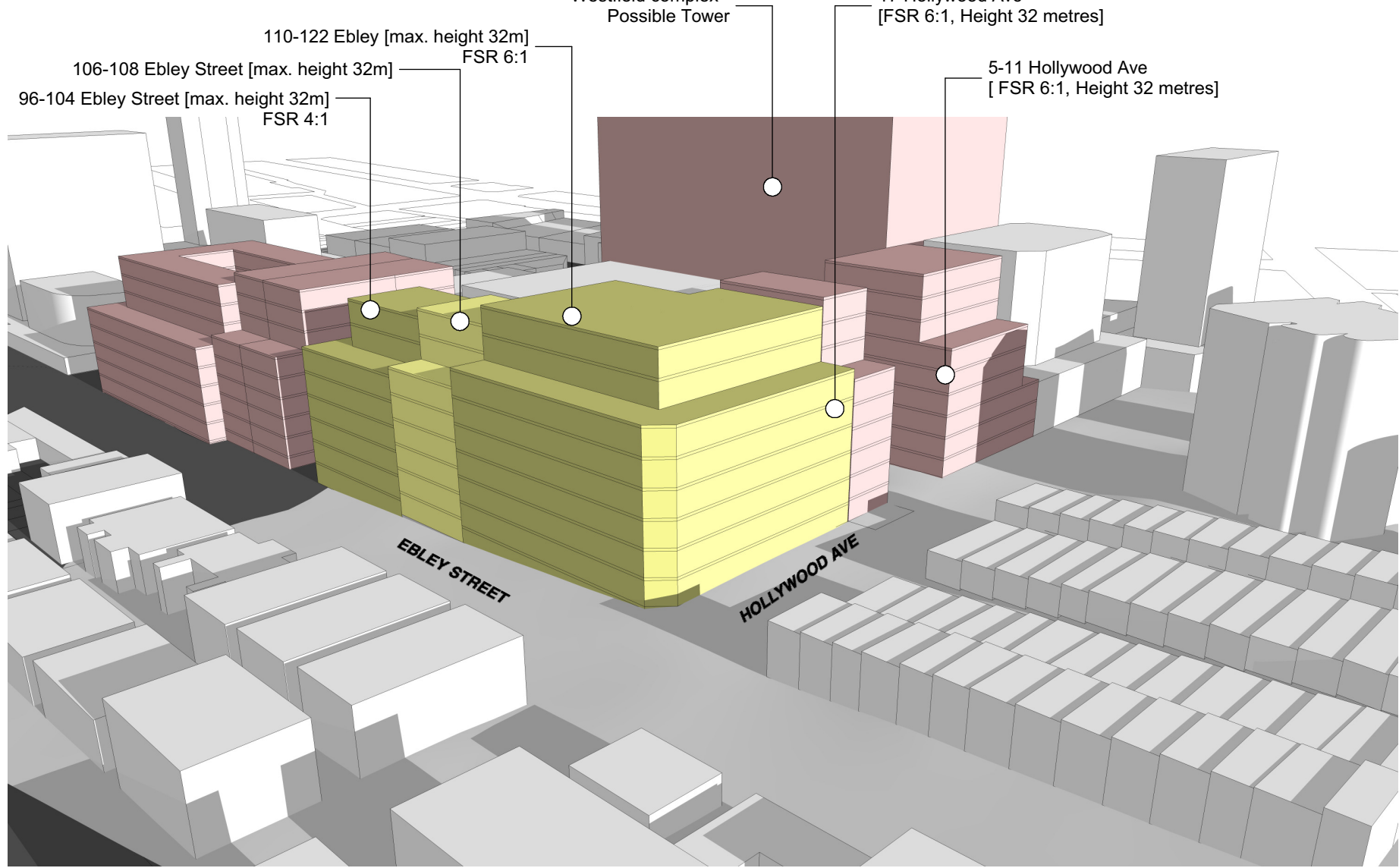


View - Corner of Ann Street/Gray Street (From Westfield)

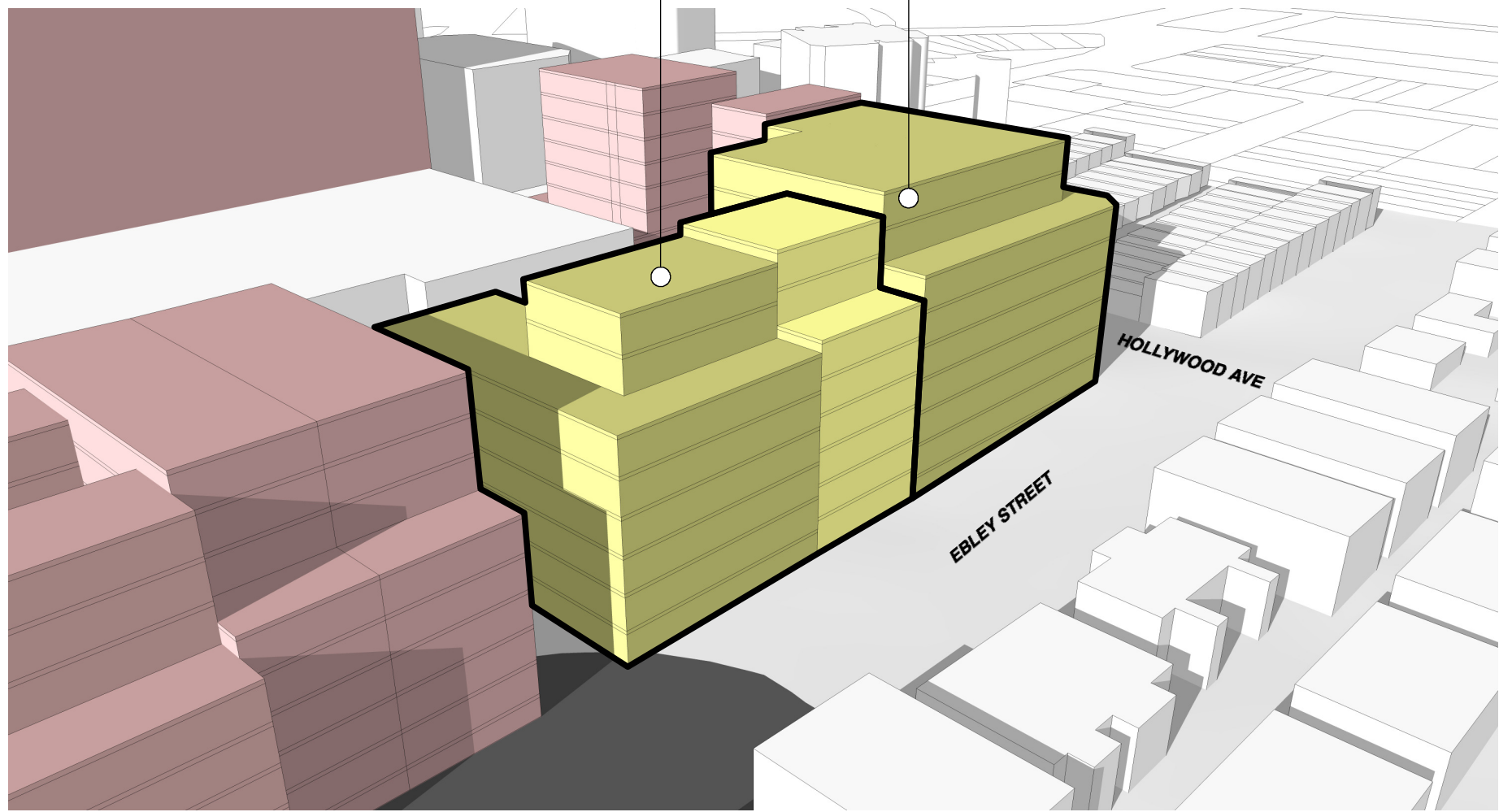
EXISTING GFA TABLE:

Commercial:	5,739m2
Residential:	1,000m2
<b>Total:</b>	<b>6,739m2</b>

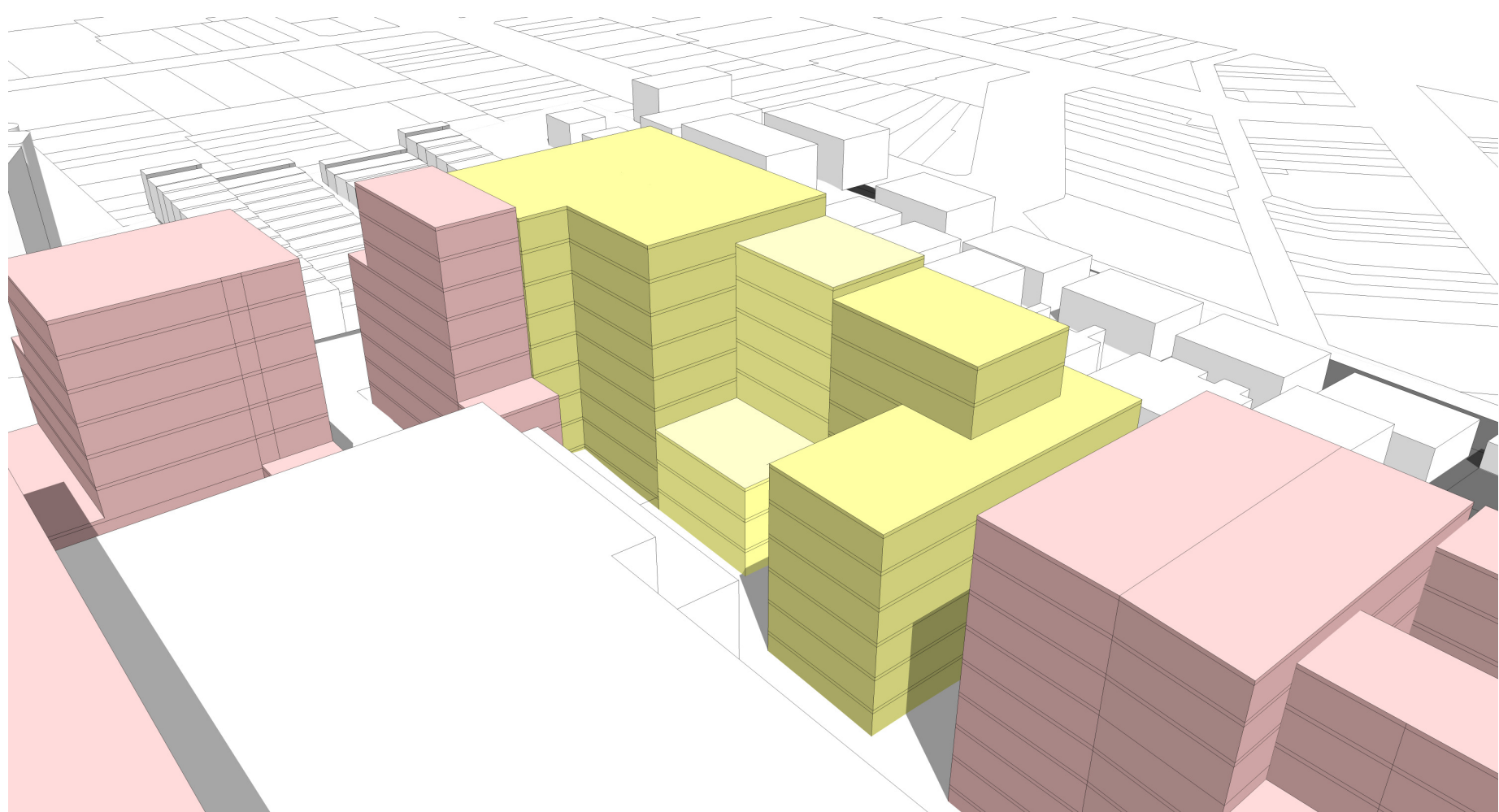
EXISTING CONTROLS - B3 ZONING



View - Corner of Hollywood/Ebley Street



View - Corner of Ann Street/Ebley Street

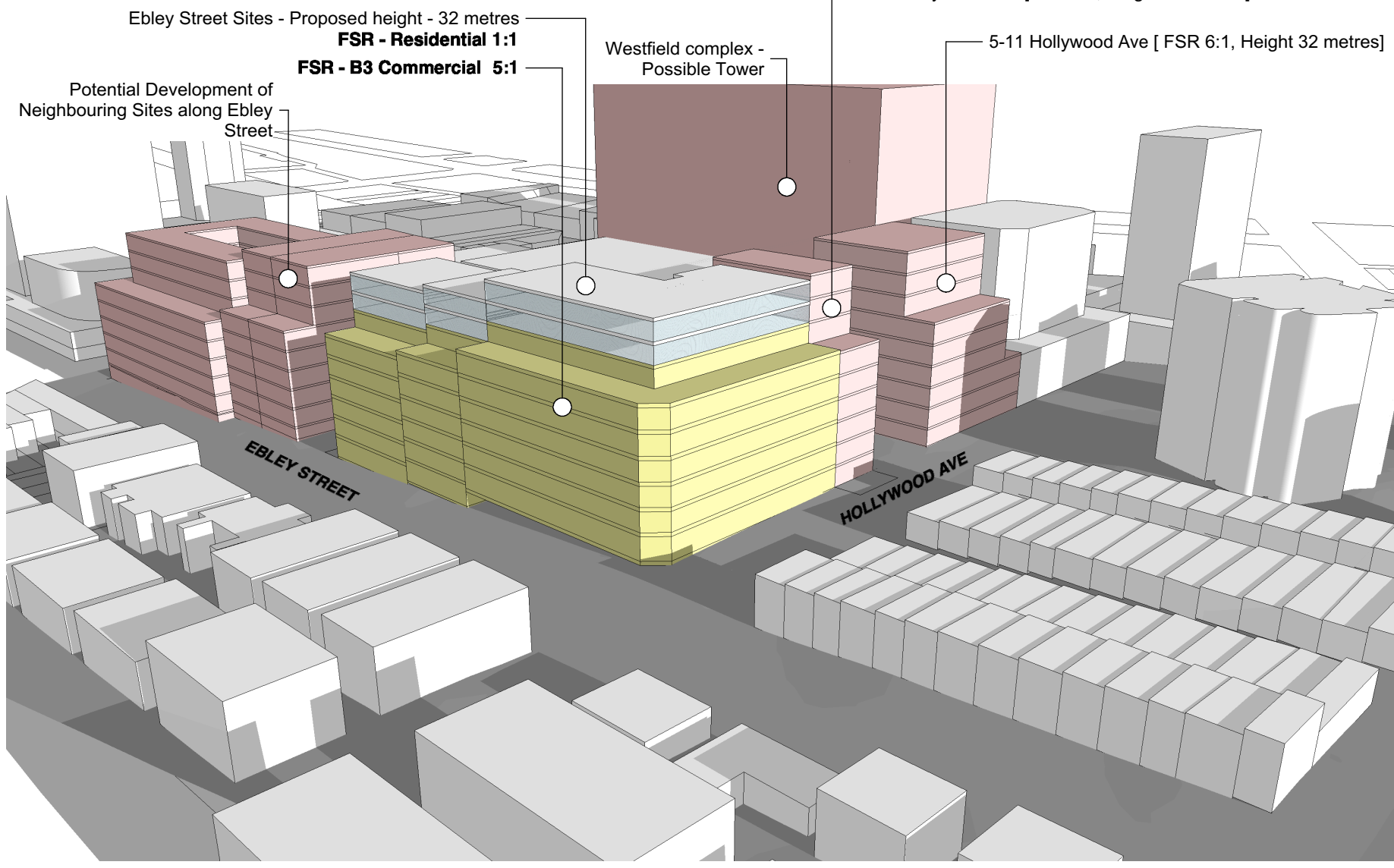


View - Corner of Ann Street/Gray Street (From Westfield)

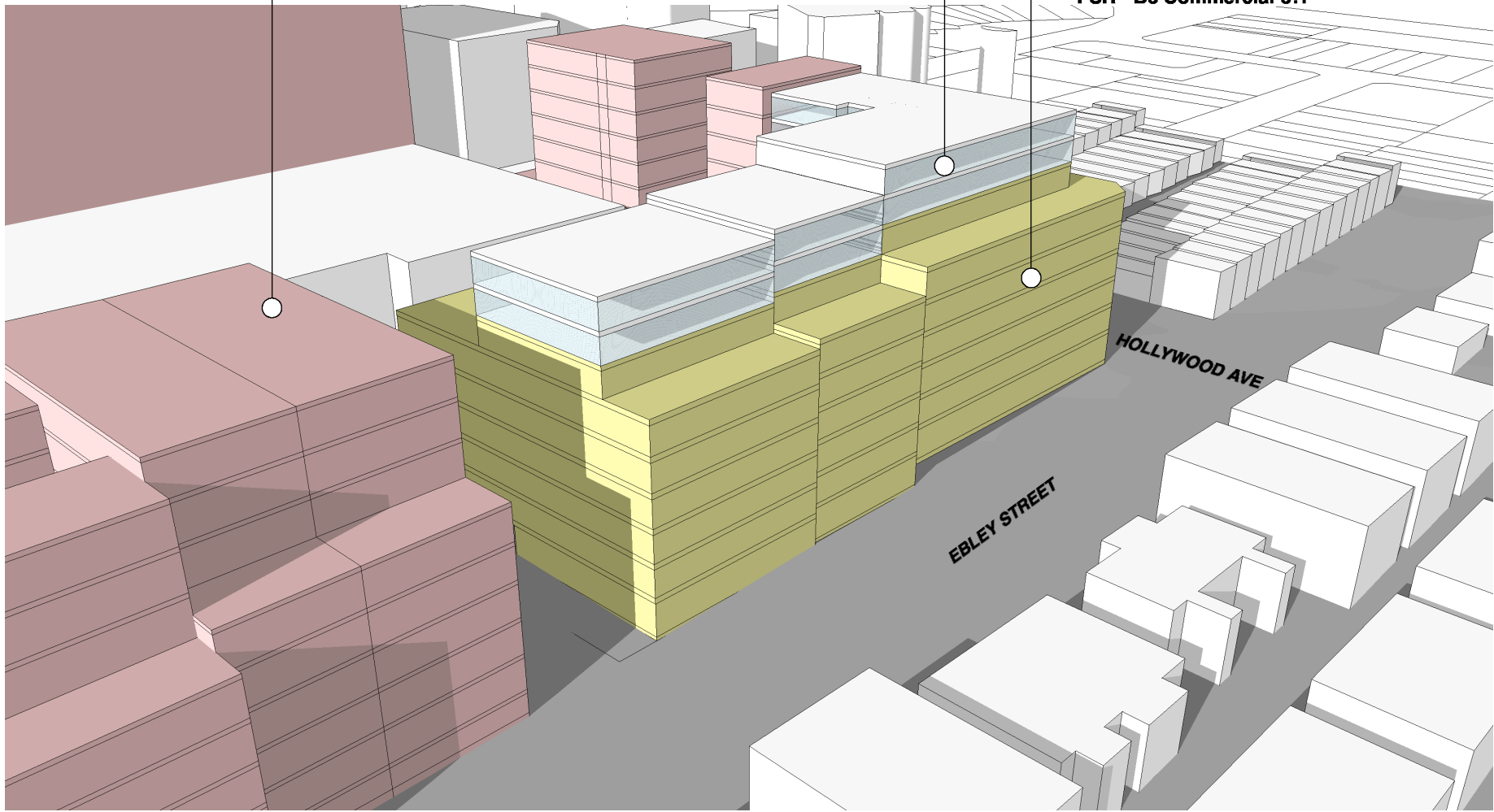
PERMISSIBLE GFA TABLE:

Commercial:	16,440m2
Residential:	-
<b>Total:</b>	<b>16,440m2</b>

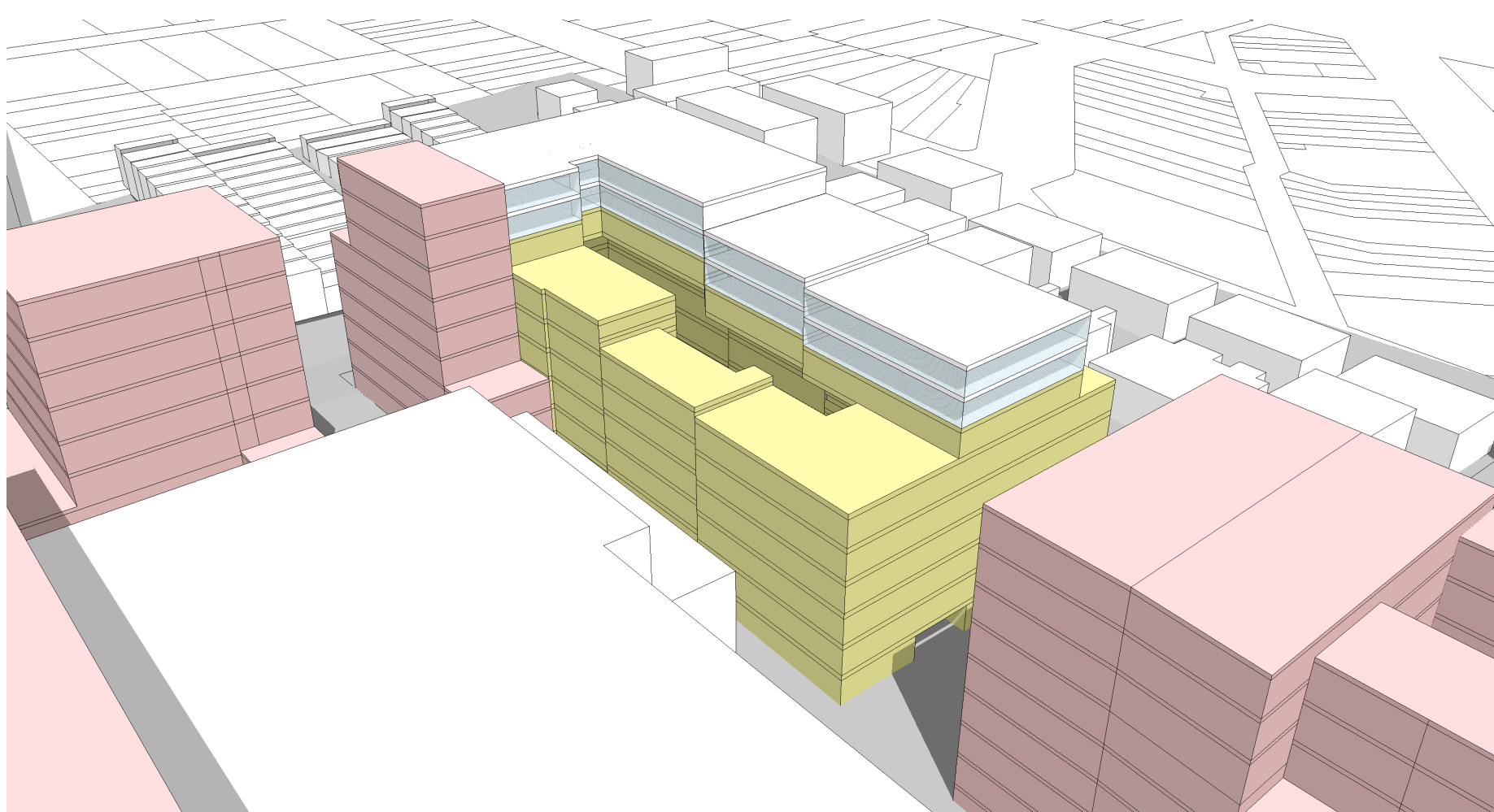
PROPOSED SCHEME



View - Corner of Hollywood/Ebley Street



View - Corner of Ann Street/Ebley Street



View - Corner of Ann Street/Gray Street (From Westfield)

PLANNING PROPOSAL MODIFICATION GFA:

Commercial:	16,450m2	FSR 5:1
Residential:	3,227m2	FSR 1:1
<b>Total:</b>	<b>19,677m2</b>	<b>FSR 6:1</b>

\* No loss of commercial floorspace  
\* No increase in height



PLANNING PROPOSAL

The drawings assume the sites are to be developed by individual owners/lots.

SEPARATION OF LOTS

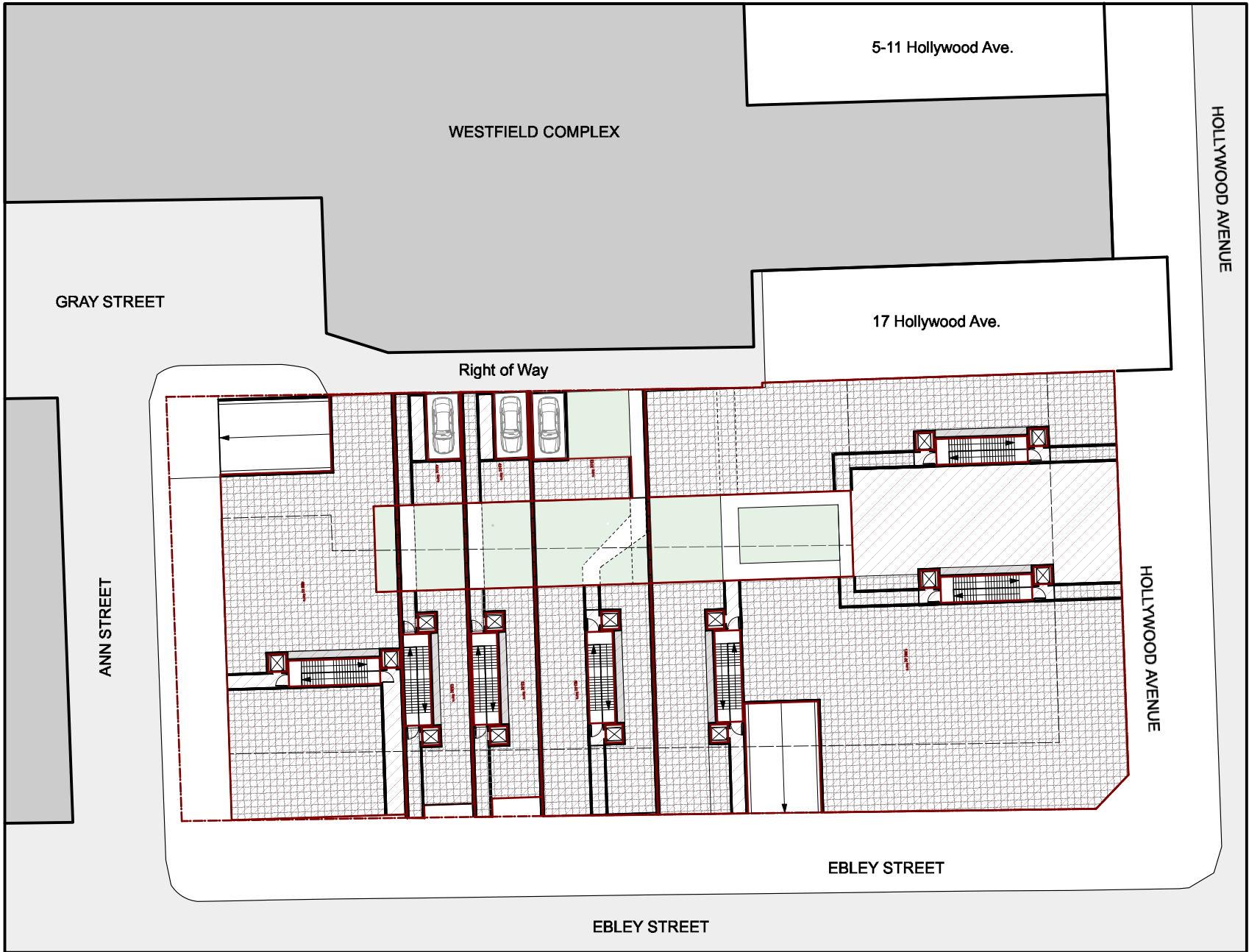


TOTAL GFA/FSR AREAS FOR INDIVIDUAL LOTS

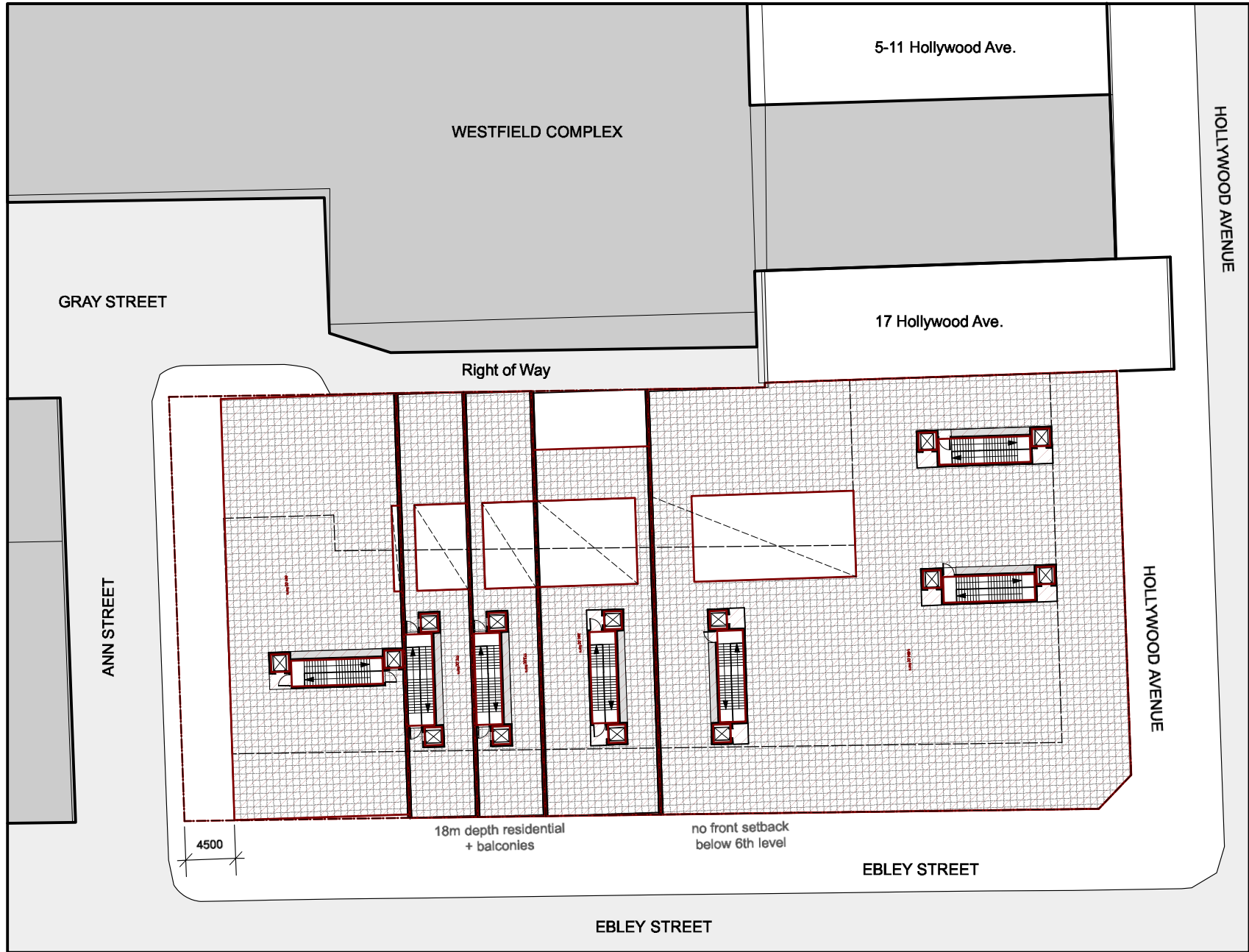
	96-100 Ebley St	102-104 Ebley St	106 Ebley St	108 Ebley St	110-122 Ebley St
	SITE 1 GFA	SITE 2 GFA	SITE 3 GFA	SITE 4 GFA	SITE 5 GFA
TOTAL AREA EACH SITE	776.00 Sq/m	233.00 sqm	233.00 S/qm	350.00 S/qm	1,635.00 S/qm
LEVEL GROUND [COMMERCIAL]	488.00 Sq/m	135.00 Sq/m	135.00 Sq/m	225.00 Sq/m	1360.50 Sq/m
BASEMENT [COMMERCIAL]	557.00 Sq/m	180.00 Sq/m	180.00 Sq/m	250.00 Sq/m	-
LEVEL 1 - [COMMERCIAL]	567.00 Sq/m	170.00 Sq/m	170.00 Sq/m	250.00 Sq/m	1,454.00 Sq/m
LEVEL 2 - [COMMERCIAL]	567.00 Sq/m	170.00 Sq/m	170.00 Sq/m	250.00 Sq/m	1,454.00 Sq/m
LEVEL 3 - [COMMERCIAL]	567.00 Sq/m	170.00 Sq/m	170.00 Sq/m	250.00 Sq/m	1,454.00 Sq/m
LEVEL 4 - [COMMERCIAL]	567.00 Sq/m	170.00 Sq/m	170.00 Sq/m	250.00 Sq/m	817.50 Sq/m
LEVEL 5 - [COMMERCIAL]	567.00 Sq/m	170.00 Sq/m	170.00 Sq/m	250.00 Sq/m	817.50 Sq/m
LEVEL 6 - [RESIDENTIAL]	291.00 Sq/m	87.00 Sq/m	87.00 Sq/m	131.00 Sq/m	817.50 Sq/m [COM]
LEVEL 7 - [RESIDENTIAL]	291.00 Sq/m	87.00 Sq/m	87.00 Sq/m	131.00 Sq/m	817.50 Sq/m
LEVEL 8 - [RESIDENTIAL]	194.00 Sq/m	59.00 Sq/m	59.00 Sq/m	88.00 Sq/m	817.50 Sq/m
Total Commercial Floor area	3,880.00 Sq/m	1,165.00 Sq/m	1,165.00 Sq/m	1,725.00 Sq/m	8,175.00 Sq/m
Total Residential Floor area	776.00 Sq/m	233.00 Sq/m	233.00 Sq/m	350.00 Sq/m	1,635.00 Sq/m
TOTAL FLOOR AREA	4,656.00 Sq/m	1,398.00 Sq/m	1,398.00 Sq/m	2,075.00 Sq/m	9,810.00 Sq/m
Residential FSR	1:1	1:1	1:1	1:1	1:1
Commercial FSR	5:1	5:1	5:1	5:1	5:1
TOTAL FSR	5:1	5:1	5:1	5:1	6:1
ALLOWABLE FSR	5:1	5:1	5:1	5:1	6:1
HEIGHT ALLOWABLE	32 Metres	32 Metres	32 Metres	32 Metres	32 Metres

	96-100 Ebley St	102-104 Ebley St	106 Ebley St	108 Ebley St	110-122 Ebley St
1 Bedroom Units	-	-	-	6 Units	-
2 Bedroom Units	6 Units	3 Units	3 Units	-	10 Units
3 Bedroom Units	3 Units	-	-	-	4 Units
TOTAL UNITS	9 Units	3 Units	3 Units	6 Units	14 Units

- KEY
- AREAS - COMMERCIAL
  - AREAS - RESIDENTIAL



Ground Floor Plan - COMMERCIAL/RETAIL FLOOR SPACE  
INCLUDES RES/COMMERCIAL ENTRYS



Typical Commercial Plan Scheme - Basement & Level 1-5 - COMMERCIAL FLOOR SPACE



Typical Plan Scheme - LEVEL 6 - 8 - RESIDENTIAL UNITS