

Appendix A

Strategy Modelling

NEWCASTLE EAST END Strategy Modelling



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1. Structure Introduction

Introduction

This analysis assesses the proposed controls for the Hunter Street Special Area as shown in the Draft Newcastle Urban Renewal Strategy. The intent is to test the resulting building envelop, parking requirements as per the DCP 2012 and the ability to contain the maximum allowable FSR.

Note the sections associated with the Special Area indicate no plant or basement. A plant level will be assumed for all buildings.

Vehicle Parking

Three parking configurations were tested, based upon the requirements of the Newcastle DCP.

- VAR 1 - 1 level of basement parking
- VAR 2 - 2 levels of basement parking
- VAR 3 - 1 level of basement parking and 1 level of podium parking

1. Structure Process

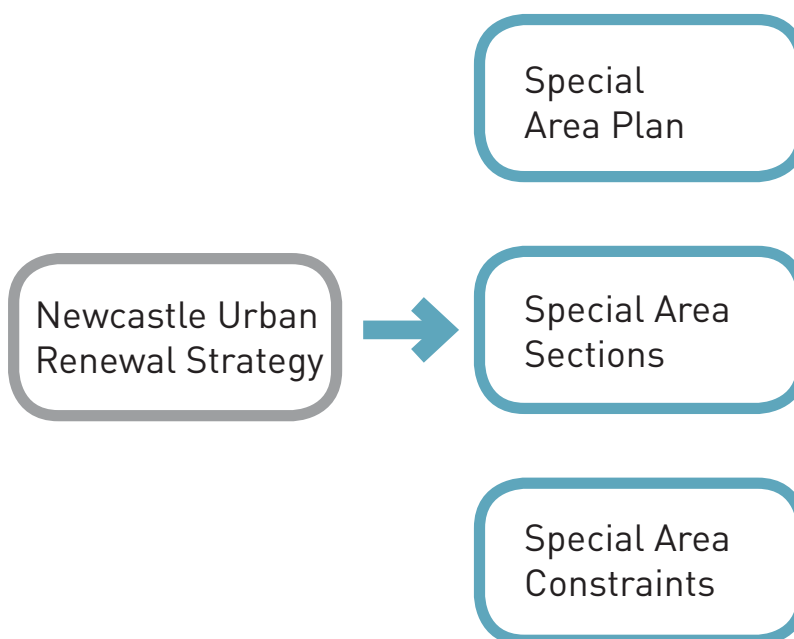
The area modelling exercise sets out to test the viability of the proposed building envelopes to contain the allowable floor space as per the proposed amendments to the LEP.

The Special Area Controls were firstly analysed to understand the constraints of building heights, setbacks and laneways. This information was then model with the Newcastle City Council 3D Virtual City Model, assessing the building envelopes in 3D.

From this, Gross Building Area rates were extracted on a block by block basis, replicating the proposed development parcels under the Special Area Controls. Efficiency rates were applied to these areas to arrive at Gross Floor Areas and Net Saleable and Leasable floor areas.

Further study was undertaken to arrive at residential unit types and numbers, as well as commercial and retail areas in calculating the parking requirement for the relative development parcels.

The conclusion outlines the findings of this modelling.



Hunter Street
Mall Special
Area Controls

1. Structure Section Analysis

The proposed section and subsequent allowable development envelope do not include allowance for parking and plant space.

The modelling undertaken here, includes an allowance of plant space in the top most floor, as well as 3 parking configurations as outlined previously.

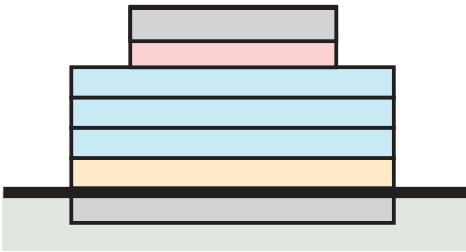
Note that the section setbacks to laneways do not correlate with the Special Area Control Plans

Newcastle Urban Renewal Strategy
DJs Block Section (block A)

Response Analysis
Required amendments to section

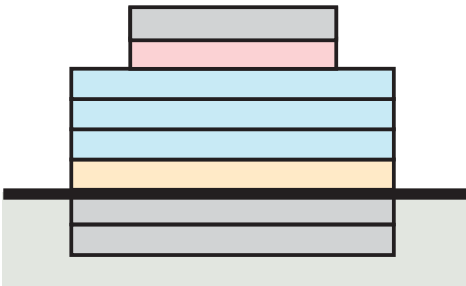
Response Modelling
Resultant section

2. Area Modelling Summary Areas



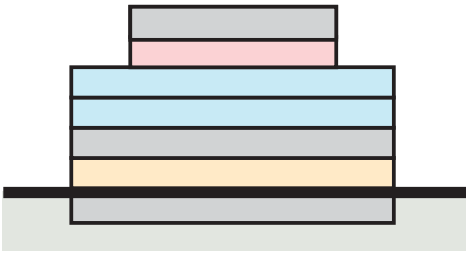
VAR 1 - 1 x basement parking

Summary - Variat	
Block	Site
Name	
A	6,553
B	3,348
C	3,393
D	3,144
E	3,444
TOTAL	16,438



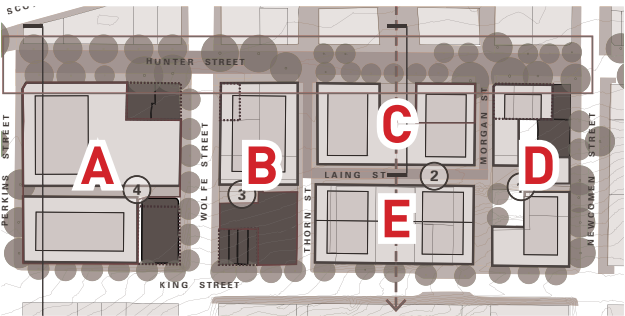
VAR 2 - 2 x basement parking

Summary - Variat	
Block	Site
Name	
A	6,553
B	3,348
C	3,393
D	3,144
E	3,444
TOTAL	16,438



VAR 3 - 1 x basement parking
1 x podium parking

Summary - Variat	
Block	Site
Name	
A	6,553
B	3,348
C	3,393
D	3,144
E	3,444
TOTAL	16,438



3. Outcome Summary

Variation 1

GFA	57,410 m ²
FSR Target	4.00 : 1
FSR Achieved	3.49 : 1
Parking Target	906
Parking Achieved	470

This variation achieves a 3.49 : 1 FSR of available floor space.

Further, the parking configuration of this variation is unable to achieve the required number of vehicle spaces.

This development outcome is unable to meet the required parking target.

Variation 2

GFA	57,410 m ²
FSR Target	4.00 : 1
FSR Achieved	3.49 : 1
Parking Target	906
Parking Achieved	939

As with Variation 1 variation achieves a 3.49 : 1 FSR of the available floor space.

By locating two basement parking levels, this variation achieves the required number of vehicle space as per the MTR. The additional parking space available table across the site is expected to offset the loss of parking space. This would then render this solution unachievable.

Variation 3

GFA	44,357 m ²
FSR Target	4.00 : 1
FSR Achieved	2.70 : 1
Parking Target	688
Parking Achieved	884

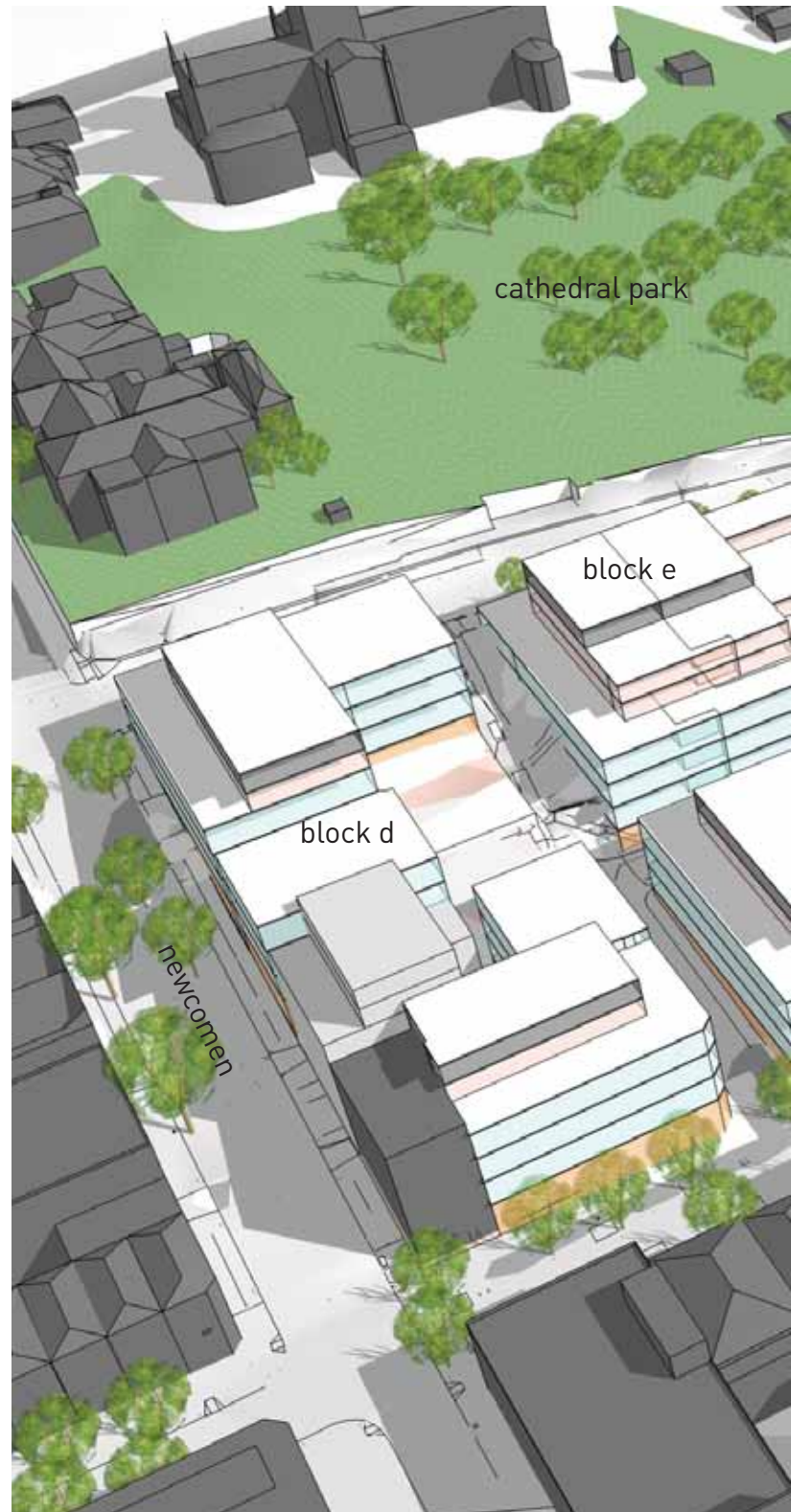
This variation achieves a 2.7 : 1 FSR of floor space.

As shown through variation 2, two levels of parking space are lost. The vehicle parking numbers under the second level is pushed into the first floor area within the development envelope. This provides viable opportunities.

3. Outcome Conclusion

When considering all aspects of a development, including parking and servicing requirements, the available area within the proposed development envelopes are reduced.

When these assumptions are included in the modelling, it becomes apparent that the Special Area Controls proposed for the co-owners holdings (blocks A - D) are not able to achieve the maximum allowable floor space.



3D modelling of the Hunter Street Special Area Controls

Appendix B

Alternative Planning Provisions

Alternative planning provisions

This appendix outlines three potential mechanisms appropriate for greater flexibility for the Co-Owners' Project Area, related to the concepts of:

- Bonus floorspace;
- Additional building height; and
- A site-specific Development Control Plan (DCP)

Bonus floorspace

The following planning provisions relate to the ability to achieve additional floorspace on a given site in return for certain public and amenity benefits. They are based on provisions contained in Sydney LEP 2012 – Clauses 6.1-6.8 - adapted to Newcastle City Centre.

Part 6 Local provisions—height and floor space

Division 1 Floor space in Newcastle City Centre

Subdivision 1 Preliminary

6.1 Objective of Division

The objectives of this Division are as follows:

(a) to provide for additional floor space to be granted as an incentive for certain development in Newcastle City Centre.

6.2 Definitions

In this Division:

accommodation floor space—see clause 6.4.

Area means an Area shown on the Floor Space Ratio Map.

car parking reduction floor space—see clause 6.5.

end of journey floor space—see clause 6.6.

entertainment and club floor space—see clause 6.7.

lanes development floor space—see clause 6.8.

6.3 Additional floor space in Newcastle City Centre

Despite clause 4.4, the gross floor area of a building on land in Newcastle City Centre may exceed the maximum permitted as a result of the floor space ratio shown for the land on the Floor Space Ratio Map by an amount no greater than the sum of any one or more of the following for which the building may be eligible:

- (a) accommodation floor space,
- (b) car parking reduction floor space,

- (c) end of journey floor space.
- (d) entertainment and club floor space,
- (e) lanes development floor space.

Subdivision 2 Types of additional floor space

6.4 Accommodation floor space

(1) A building that is in an Area, and is used for a purpose specified in relation to the Area in paragraph (a), (b), (c), (d), (e), (f) or (g), is eligible for an amount of additional floor space (*accommodation floor space*) equivalent to that which may be achieved by applying to the building the floor space ratio specified in the relevant paragraph:

- (a) Area XX, hotel or motel accommodation—XX:1,
- (b) Area XX office premises, business premises, retail premises, residential accommodation or serviced apartments—XX:1,

(2) The amount of additional floor space that can be achieved under a paragraph is to be reduced proportionally if only part of a building is used for a purpose specified in that paragraph.

(3) More than one amount under subclause (1) may apply in respect of a building that is used for more than one purpose.

6.5 Car parking reduction floor space

Development on land in Newcastle City Centre that results in the use of any part of a basement of a building being changed from a car park or from an area that is used for parking cars to any other use, causes the building to be eligible for an amount of additional floor space (*car parking reduction floor space*) equal to the area of any such changed use.

6.6 End of journey floor space

(1) A building on land in Newcastle City Centre that is used only for the purposes of commercial premises and that has all of the following facilities together in one area of the building, is eligible for an amount of additional floor space (*end of journey floor space*) equal to the floor space occupied by those facilities:

- (a) showers,
- (b) change rooms,
- (c) lockers,
- (d) bicycle storage areas.

(2) The amount of end of journey floor space cannot be more than the amount of floor space that can be achieved by applying a floor space ratio of XXX:1 to the building.

6.7 Entertainment and club floor space

A building on land in Newcastle City Centre is eligible for an amount of additional floor space (*entertainment and club floor space*) equal to the floor space of any parts of the basement of the building used for the purposes of entertainment facilities or registered clubs.

6.8 Lanes development floor space

- (1) This clause applies only to development consisting of alterations or additions to a building that:
 - (a) is in existence on the making of this Plan, and
 - (b) is on land in Newcastle City Centre, and
 - (c) adjoins a public road with a width less than 6 metres (a *lane*).
- (2) Development to which this clause applies that results in the total floor space used for lanes development purposes within all relevant premises in a building being greater after the development than it was before the development causes the building to be eligible for an amount of additional floor space (*lanes development floor space*) equal to that increase.
- (3) For the purposes of this clause:
lanes development purpose means:
 - (a) business premises,
 - (b) community facilities,
 - (c) entertainment facilities,
 - (d) food and drink premises,
 - (e) information and education facilities,
 - (f) places of public worship,
 - (g) pubs,
 - (h) recreation facilities (indoor),
 - (i) registered clubs,
 - (j) retail premises.

Alternative building height

The following planning provisions relate to the ability to achieve additional building height on a given site. They are based on provisions contained in Sydney LEP 2012 – Clause 6.20 - adapted to Newcastle City Centre. The Clause may specify different street blocks as “Block Nos” – e.g. DJ’s block could be “Block 1”.

Division 2 Building height in Newcastle City Centre

6.20 Alternative building heights

- (1) The objective of this clause is to provide for additional building height on parts of certain sites (within the area bounded by Perkins Street, Hunter Street, Newcomen Street and King Street) if the development of the site provides for publicly accessible open space, lanes, shared ways and other links through the site.
- (2) This clause applies to land within Area XX on the Height of Buildings Map.

- (3) Despite clause 4.3, development consent may be granted to the erection of a building with a maximum height of:
 - (a) XX metres on up to XX% of the area of block 1, or
 - (b) XX metres on up to XX% of the area of block 2, or
 - (c) XX metres on up to XX% of the area of block 3.
- (4) Development consent must not be granted under this clause unless the consent authority is satisfied that the development will:
 - (a) include recreation areas and lanes, shared ways and roads through the site, and
 - (b) include business premises and retail premises that have frontages at ground level (finished) to those recreation areas, lanes and roads, and
 - (c) provide a satisfactory distribution of built form and floor space development.
- (5) Development consent must not be granted under this clause in relation to development on land in block 1, 2 or 3 unless the consent authority is satisfied that the development relates to the whole of the block and, except as otherwise provided by this clause, no other land.
- (6) Development on land in block 1 may also relate to the whole of any one or more of the following:
 - (a) Lot XX, DP XXX,
 - (b) Lot XX, DP XXX,
 - (c) Lot XX, DP XXX.
- (7) Development on land in block 3 may also relate to the whole of any one or more of the following:
 - (a) Lot XX, DP XXX,
 - (b) Lot XX, DP XXX.
- (8) In this clause:

block 1 means:

 - (a) Lot XX, DP XXX, and
 - (b) Lot XX, DP XXX, and
 - (j) the whole of the road known as "XXXXX".

Site specific development control plan

The following planning provisions relate to the requirement for a site-specific development control plan. They are based on provisions contained in Sydney LEP 2012 – Clause 7.20 - adapted to Newcastle City Centre.

Part 7 Local provisions—general

Division 4 Miscellaneous

7.20 Development requiring preparation of a development control plan

- (1) This clause applies to any of the following development:

- (a) development for the purposes of a new building,
 - (b) development that increases the gross floor area of an existing building.
- (2) Development consent must not be granted to development to which this clause applies on the following land unless a development control plan that provides for the matters in subclause (4) has been prepared for the land:
- (a) land in Newcastle City Centre, bounded by Perkins, Hunter, Newcomen and King Streets.
- (3) A development control plan is not required to be prepared if the consent authority is satisfied that such a plan would be unreasonable or unnecessary in the circumstances or that the development:
- (a) involves only alterations or additions to an existing building, and
 - (b) does not significantly increase the height or gross floor area of the building, and
- (c) does not have significant adverse impacts on adjoining buildings or the public domain, and
- (d) does not significantly alter any aspect of the building when viewed from public places.
- (4) The development control plan must provide for all of the following:
- (a) requirements as to the form and external appearance of proposed development so as to improve the quality and amenity of the public domain,
 - (b) requirements to minimise the detrimental impact of proposed development on view corridors,
- (c) how proposed development addresses the following matters:
- (i) the suitability of the land for development,
 - (ii) the existing and proposed uses and use mix,
 - (iii) any heritage issues and streetscape constraints,
 - (iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,
 - (v) the bulk, massing and modulation of buildings,
 - (vi) street frontage heights,
 - (vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,
 - (viii) the achievement of the principles of ecologically sustainable development,
 - (ix) pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network,
 - (x) the impact on, and any proposed improvements to, the public domain,
 - (xi) the impact on any special character area,
 - (xii) achieving appropriate interface at ground level between the building and the public domain,
 - (xiii) the excellence and integration of landscape design,
 - (xiv) the incorporation of high quality public art into the fabric of buildings in the public domain or in other areas to which the public has access.

Note. Section 83C of the *Environmental Planning and Assessment Act 1979* provides that if an environmental planning instrument requires the preparation of a development control plan before any particular or kind of

development is carried out on any land, that obligation may be satisfied by the making and approval of a staged development application in respect of that land.

