
H o r n s b y S h i r e C o u n c i l



D A 5 4 5 / 2 0 1 3

**Proposed mixed development:
Hannah Street + Beecroft Road
Beecroft**

Urban Design Review

A p r i l 2 0 1 4

B R E T T N E W B O L D
urban planning + urban design
po box 159 pacific palms 2428

SUMMARY

Although the proposed development is 'architecturally-confident' and comprises a number of positive features, it fails to comply with or to demonstrate sufficient regard for state and local controls that require consideration of urban design quality.

Positive aspects of the proposed development include:

- The proposed mix of residential, retail and commercial uses;
- A reasonable mix of dwelling types and sizes are proposed;
- Residential floorspace is distributed in three buildings which surround a publicly-accessible courtyard;
- Retail floorspace is oriented toward Hannah Street which is the main street within the Beecroft Village;
- A strip of commercial or retail tenancies along almost the full frontage to Beecroft Road;
- Strongly-articulated building forms which respond to the site's sloping topography;
- Architectural compositions of facades which vary, and which incorporate a number of different elements.

However, these positive aspects are overwhelmed by significant elements of the proposed development which demonstrate an unsatisfactory level of urban design quality:

- Substantial proportions of buildings B and C exceed the 17.5m maximum building height which is specified by the *Hornsby LEP 2013 (HLEP)* together with the five storey limit that is nominated by Part 9 of the *Hornsby DCP 2013 (HDCP)*.
- The 'street wall' facing Hannah Street incorporates foreground elements that present a scale of four to five storeys, and consequently this elevation fails to display the pedestrian-friendly character of two storey shop-front buildings which are dominant contextual features of the Beecroft Village.
- Eastern elevations of proposed Buildings B and C create village backdrops with a scale that is equivalent to seven storeys, or more than two storeys taller than desired by the local controls, and consequently create a visually-overwhelming backdrop with a scale that is incompatible with the pedestrian-friendly character that is a widely-recognised quality of the Beecroft Village.
- The form and design of Beecroft Road facades in buildings A and C fail to provide a complementary scale in relation to neighbouring buildings which are unlikely to undergo significant redevelopment due to heritage-listing or isolated sites.
- Configuration of retail areas is unlikely to optimise commercial activity upon this site, or to stimulate highest-possible levels of pedestrian traffic between this major development and the wider village centre, and consequently would not contribute to an effective 'anchor' development that would enhance pedestrian amenity or existing business activity within the Beecroft Village.
- Design of vehicle access demonstrates poor regard for pedestrian and retail amenity in Hannah Street, and would interrupt pedestrian desire lines to an extent that is likely to further-isolate the proposed development from the wider village.

-
- The primary point of pedestrian access to the residential component (at the corner of Beecroft Road and Hannah Street via an architecturally-grand portal) does not clearly define 'residential territory' for the development or incorporate features which would guarantee satisfactory security for residents.
 - Potential to achieve positive relationships with future developments to the east (in terms of built form and pedestrian links) would be compromised by the 'enclosed' nature of proposed vehicle access.
 - Residential floorplans provide unsatisfactory amenity for a number of dwellings, and incorporate common access which either suffers from poor amenity or is unlikely to encourage social interaction between residents.

Detailed consideration of architectural plans has confirmed straightforward design amendments that would overcome the majority these deficiencies without requiring significant reduction of floor area. This observation is significant for two reasons:

- It is consistent with the NSW Land and Environment Court's 'Pafburn Planning Principle' which encourages amendments that deliver superior design quality as well as improved-compliance with planning controls; and
- FSR is not limited by the *HLEP*, and therefore the proposal's gross floor area is not inherently acceptable or 'right': the amount of floor area which is suitable for this site is determined by a contextually-appropriate building envelope that satisfies qualitative considerations as well as numeric controls in relation to height, setbacks, form and residential amenity.

In conclusion, the proposed development fails to demonstrate a level of urban design quality that would warrant a consent. Unsatisfactory quality is the result of numeric non-compliances which have produced an excessively tall development, as well as design decisions which have failed to deliver a development that would sit comfortably and productively within the Beecroft Village.

Comprehensive amendment of this proposal is recommended in order to remedy the suite of deficiencies that have been identified by this report.

SCOPE OF THIS ASSESSMENT

In relation to DA 545/2013, Hornsby Shire Council has requested an independent assessment of urban design quality.

This assessment has evaluated design quality according to relevant state and local planning controls, together with a more-generalised merit assessment which is based upon best-practice examples of mixed development.

The following statutory instruments specify considerations which relate to urban design quality:

- *SEPP No 65:*
Ten design quality principles which are supplemented by an associated guideline: the *Residential Flat Design Code*;
- *Hornsby LEP 2013 (HLEP):*
Aims, objectives for height of buildings, a maximum building height of 17.5m, and heritage conservation provisions.

Detailed design quality considerations are specified by Part 9 of the *Hornsby DCP 2013 (HDCP)*:

- *Key Design Principles Diagrams* in section 9.6.15:
Specifying desired directions for co-ordinated redevelopment of separate properties within the Beecroft Village;
In effect, summarising design quality requirements which arise in relation to the *HDCP's* detailed controls.
- Built form controls:
Five storey limit, and setbacks which increase in proportion to height in order to emphasise the two storey scale of traditional shop-front buildings;
Maximum dimensions for floorplates, together with minimum separations between buildings in order to promote a pedestrian-friendly scale as well as to ensure that new buildings would be compatible with values of the surrounding heritage conservation area;
Articulation requirements to ensure that scale of new buildings would be compatible with existing buildings - in particular, heritage items which are identified by the *HLEP*.
- Controls to promote an active public domain:
Requirement for retail and business activities along street frontages and facing new public places in order to stimulate highest-possible levels of pedestrian and business activity within the Beecroft Village as a whole;
Desirable locations for new public places and walkways in order to distribute increased levels of pedestrian activity as well as to accommodate new business premises.

-
- Residential amenity provisions:
Primarily, in relation to sunlight, privacy, security and the design of open spaces;
Also, the requirement to accommodate a mix of dwelling types and sizes.
 - Technical and servicing requirements:
Desirable locations for vehicle access to new developments.

CONTEXT + THE PROPOSED DEVELOPMENT

Details of the subject site and its immediate surroundings provide a foundation for this design quality assessment.

The following details are considered most-relevant:

- Location:
The subject site is a corner location that marks the western edge of an established village centre.
The village centre is part of a wider heritage conservation area that includes surrounding residential neighbourhoods.
- Visibility:
The site is elevated above the centre of the Beecroft Village which is located near the foot of Hannah Street adjacent to the railway station, and as a result, any development upon this site would be visible from all four quarters.
The site has immediate visual relationships with residential areas that are located to the north and west, with the village to the south and east, and in particular, with Hannah Street which is the village mainstreet.
- Buildings and development nearby:
Within the village centre, existing shopfront buildings typically display a scale of one or two storeys and include some traditional shop-terraces (for example, immediately to the east of the site).
Two heritage-listed properties adjoin the site: a former cottage to the north, and to the south upon the street corner which faces the site, the former post-office.
Within the residential area that adjoins the site to the north, proposals for five storey residential redevelopment have been submitted to the Council but have not yet been determined.
- Pedestrian routes:
Within this village, existing pedestrian "desire lines" are confined to street footpaths and open-air carparks.
Controls in the *HDGP* provide for new pedestrian links across the subject site which, subject to future developments, would enable direct access to the eastern end of the village and the station.

Key elements of the proposed development include:

- A mix of land uses:
Residential, retail and commercial.
- The major component is residential:
Accommodated by three buildings which surround a central courtyard;
With five or six residential levels in each of the proposed buildings;
Surrounding a central publicly-accessible courtyard which provides pedestrian access to each of the residential buildings via three points of access from Beecroft Road.
- Retail and commercial components which are relevant to the established village:
Proposed residential buildings are elevated above a retail level that would accommodate a supermarket plus an unspecified number of speciality stores;
Small retail areas also extend into the basement level which adjoins Hannah Street;
Unspecified employment uses are proposed along the full frontage of Beecroft Road as ground floor levels in two of the proposed residential buildings.
- Servicing:
Carparking is provided by four basement levels plus several open air spaces in the residential courtyard;
The basement also accommodates a below-ground loading dock which would service retail areas;
Vehicles would access these basements from the lowest corner of the site which faces Hannah Street, via separate ramps for shoppers, residents and delivery vehicles.
- Exterior architecture:
Building forms are strongly articulated in response to the site's sloping topography;
Facades incorporate a variety of architectural elements;
The architectural composition displays a modern character which is influenced by cubic or rectilinear forms, blunt parapets and by facades which predominantly incorporate planes of face or rendered brickwork.

DESIGN QUALITY

The planning controls

As noted previously, the *Key development Principles Diagrams* in section 9.6.15 of the *HDCP* provide a convenient summary of considerations for urban design quality by reference to the following topics:

- Built form and scale;
- Activity along public frontages;
- Servicing and access;
- Residential amenity.

This assessment refers to each of these topics, together with technical aspects of the proposed development which have a bearing upon urban design quality.

Built form + scale

Height and scale of proposed building forms do not comply with local controls or provide appropriate responses to purposes of those controls:

- i Portions of buildings B and C exceed the maximum permissible height of 17.5m:
Non-compliant elements include the top-most bedroom level of units C 503 and 504 facing the corner of Beecroft Road and Hannah Street, and unit C 501 at the middle of the Hannah Street elevation;
Most-likely, units B 501 and B 502 along the eastern edge of Building B also exceed the maximum height, but this cannot be confirmed due to absence of survey information;
Consequently, the proposed development would be inconsistent with the Council's recently-adopted development strategy which seeks to manage height according to site constraints (in this case, including topography, built form character and pedestrian amenity, and heritage).
- ii Facing Hannah Street and the eastern boundary, a significant proportion of the proposed building forms exceed five storeys:
The *HDCP* repeatedly specifies five storeys as a critical limit for acceptable height and scale;
The central portion of the Hannah Street elevation accommodates six levels of windows, and this elevation is "bookended" by elements with a scale that is equivalent to six storeys: four residential storeys above a podium which contains an unusually tall single storey;
The eastern elevation of Building B contains five occupied levels which are seated upon a podium that is similar to the neighbouring two storey shopfront building, creating a backdrop to the centre of the village which would have a scale of seven storeys;

As a result, the proposed development would appear at least one storey taller than desirable for the Hannah Street frontage, and would present an excessively tall western backdrop to the village centre.

- iii Building forms and exterior architecture would not contribute to a pedestrian-friendly scale facing Hannah Street, or achieve reasonable compatibility with the scale and character of existing shop-front buildings in the core of the Beecroft Village:

These outcomes are reiterated by the *HDCP* as requirements for redevelopment of properties in the Beecroft Village;

Although the Hannah Street facade nominally complies with the *HDCP's* setback and articulation controls, scale and mass of Building C are accentuated by three-storey "boxed frames" which surround "stacks" of balconies;

Visual impacts of these framed elements are accentuated not only by their apparent height, but also by street setbacks which are less than 2m, resulting in a 'street wall' with an apparent scale of between four and five storeys;

Repetition of these modular frames overwhelms the effect of complying setbacks which are proposed for exterior walls and balconies, and scale of this 'street wall' fails to provide an appropriate reference to traditional shop-front buildings which are streetscape features of Hannah Street;

Overall, the repetition of framed balcony elements dominates the proposed facade facing Hannah Street, and consequently ensures that Building C would be incompatible with the pedestrian-friendly scale that is desired for this street frontage;

Dimensions and design of the proposed vehicle entrance exacerbate these undesirable contrasts between Building C and the surrounding streetscape.

- iv Scale of proposed building forms has not been moderated by appropriate setbacks or heights facing the former cottage in Beecroft Road which is a listed heritage item:

The proposed boundary setback would accommodate a driveway rather than a garden area, and consequently would not provide the most-appropriate response to garden curtilage of the former cottage;

In addition, the northern elevation of Building A which faces the cottage presents a four storey scale which is three storeys taller than the cottage eaves;

A perspective of proposed Building A viewed from the north-west illustrates the dominant scale and character, and confirms the unsatisfactory visual relationship with the former cottage.

- v Scale of proposed building forms also has not been moderated next to the isolated site in Beecroft Road which is unlikely to accommodate significant redevelopment:

Although negotiations to incorporate that small property with the larger development site have not succeeded, the *SEPP No 65* principle for 'context' demands that the proposed development should demonstrate an appropriate scale response to the isolated building;

Dimensions of this isolated site include a depth of 10m, which means that redevelopment is unlikely to accommodate more than two storeys due to the limited capability to provide on-site parking;

Facing Beecroft Road, foreground elements of elevations in proposed Buildings C and A display a scale of three and four storeys (respectively), and overall heights of five storeys;

In conjunction with sheer side elevations, form and scale of the proposed buildings will result in a 'gap toothed' streetscape, and consequently demonstrate insufficient regard for context.

Activity along public frontages

Evaluation of pedestrian activity requires the consideration of proposed business and residential components.

i Business frontages

Effective configuration of the proposed business component is essential in order to maintain and enhance existing pedestrian amenity as well as business activity within the Beecroft Village. Configuration of interior elements has a direct bearing upon the suitability of proposed public frontages which are significant considerations according to the local controls.

Although Buildings A and C would present frontages to Beecroft Road which are satisfactory in terms of the continuity of business and pedestrian activity, configuration of the Hannah Street frontage is not acceptable.

Due to the proposed retail layout, the Hannah Street frontage does not display a level of retail activity which would be appropriate for this main street frontage, and which is essential to stimulate optimum levels of pedestrian and business activity within the Beecroft Village as a whole.

Proposed layout of the retail area and associated servicing would compromise the strategic potential of this 'anchor' development:

- i An insufficient proportion of the Hannah Street frontage would accommodate visible shopfronts or pedestrian entrances:

Approximately 30% of the 65m frontage, or a distance of 25m, accommodates shops which would be located at street level plus a mall entrance;

Less than 10m of the proposed retail frontage offers an opportunity for direct street access to shops, and access to almost 90% of specialty shops and the supermarket would be via the internal mall;

Facing Hannah Street, the proportion and configuration of proposed retail spaces do not reflect the traditional pattern of shop-terraces in this village which present as a continuous series of shopfronts which are stepped along sloping street frontages;

Consequently, configuration of the proposed retail area does not contribute to compatibility of the proposed development with building forms and street-front activity that are important characteristics of the surrounding village.

-
- ii Design of the proposed mall entrance would not display significant indoor retail activity facing Hannah Street:

The proposed mall entrance is approximately 8m wide, and represents nearly 30% of the proposed active retail frontage to Hannah Street;

The entrance opens onto an internal mall which has an alignment that is both cranked and splayed relative to Hannah Street, and consequently internal retail activity is virtually invisible from that street frontage;

Retail spaces which flank the proposed mall entrance are located partly or fully below street level, and consequently would not contribute to street-level activity;

Although mall access to shops is a logical response to this site's sloping topography and proposed inclusion of a supermarket, appropriate design of the mall and street entrance are essential in order to promote effective interaction between the development and the wider village.

- iii Effectiveness of the development as an 'anchor' would be compromised by configuration of the proposed retail area which does not conform with commercial best-practice:

In small-scale retail developments such as that which is proposed, commercial best-practice demands that pedestrian activity and shopfronts are concentrated around a single central mall rather than dispersed along 'cul-de-sac' corridors;

The retail component of the proposed development incorporates a central mall, together with a branch corridor which terminates in a dead-end which is concealed from the central mall and the street entrance;

The branch corridor provides access to travelators which are proposed as the primary means of vertical circulation between the proposed retail area and carpark;

However, the branch corridor and the off-centre location of proposed travelators would contribute to the dispersal of pedestrian activity and shop-frontages which, as noted, is not desirable in a small-scale retail development;

Location of the travelators with access from the branch corridor also would fail to provide most-direct trolley access between the supermarket and the carpark (which is a critical commercial requirement), and absence of a direct visual link between the travelators and Hannah Street would not encourage optimum use of the proposed development as a 'base' for multi-purpose shopping trips within the Beecroft Village (which would be underpinned by the opportunity to 'park once');

Design and dimensions of the proposed mall entrance and surrounding shops are not appropriate to accommodate landmark tenants such as cafes which typically generate high levels of pedestrian activity and as a consequence, not only would attract shoppers from Hannah Street, but also would stimulate pedestrian activity within the wider village;

- iv Interaction between the proposed development and the wider village also would be compromised by width and design of the proposed vehicle entrances:

The driveway entrance is 15m wide, and would occupy approximately 20% of the site's frontage to Hannah Street;

After entering the site, the proposed driveway immediately splits to provide three separate points of access for shoppers, residents and delivery vehicles, and consequently would accommodate a complicated variety of turning movements

which are not proposed to be controlled by signals, and therefore which pedestrians would find difficult to predict;

The proposed driveway would be located less than 10m from the proposed mall entrance, and consequently traffic would compromise the amenity and retail potential of that important frontage as well as perceived pedestrian safety of the Hannah Street footpath;

As a consequence, retail potential of this anchor development and pedestrian access to the wider village would be compromised by the proposed driveway;

Although vehicle access from Hannah Street and three-way division of driveways represent logical solutions for the proposed mixed development, effective interaction between an anchor development and the wider village demand alternative design and management of vehicle access together with increased separation between the mall entrance and the driveway.

- v Configuration of proposed vehicle access would compromise potential for co-ordinated redevelopment of neighbouring properties within the Beecroft Village:

Vehicle access is enclosed, and incorporates ramps which commence their descents within 20m of the Hannah Street frontage;

Although design of proposed access ramps is a logical response to sloping topography and the proposal to accommodate a supermarket, they are not consistent with local planning controls which anticipate an open laneway between neighbouring development sites;

Potential benefits of that laneway are illustrated by section 9.6.15 of the *HDGP* and by the east-west cross section which is a *Key Development Principles Diagram*: an open air laneway would accommodate access to adjacent developments together with secondary active frontages which could contribute to pedestrian movement and business activities;

Nevertheless, acceptable solutions for vehicle access are complicated by the desire to accommodate a supermarket at street level, and by the logical proposal for mall access between that supermarket and the street.

- vi Commercial potential of the prominent corner which faces Beecroft Road and Hannah Street has not been realised:

An architecturally-imposing walkway to the residential development is proposed in this location, together with a double-height commercial tenancy next to Beecroft Road;

However, the eastern edge of this walkway comprises blank side walls to a dwelling and a commercial tenancy, plus a fire stair and lift shaft which do not display features of an active frontage, and therefore compromise strategic potential of a prominent street corner location.

ii Residential frontages

Residential frontages of the proposed development relate to the central courtyard, and points of access to that courtyard.

Design of proposed residential buildings would provide a satisfactory backdrop of visible activity surrounding that courtyard, and would contribute to a secure environment within this

publicly-accessible area. Private entrances to podium-level dwellings together with visitor parking spaces would ensure a flow of pedestrians which would contribute to passive security.

Also, reasonable opportunities for social interaction between residents would be provided by general layout of the proposed courtyard which provides access to apartment lobbies.

However, configuration of this publicly-accessible courtyard raises one important concern:

- i Configuration of the entrance at the corner of Beecroft Road and Hannah Street does not clearly establish 'residential territory' or provide satisfactory security for residents:

Significance of this corner entrance is due to its role as the primary point of pedestrian access between proposed apartments and the Beecroft Village;

Configuration and design of the entrance as currently-proposed involve a grand architectural treatment which masks the fact that proposed building forms would create a visually-congested undercroft that is more than 20m long and 3m wide at its narrowest point;

Due to the configuration of adjacent building forms, this undercroft does not provide clear sightlines from the street corner in a north-easterly direction toward the central residential courtyard, frontages do not allow after-hours surveillance from occupied floorspace, and stepped building forms could permit concealment of intruders;

Consequently, safety and security for residents would be compromised.

Residential amenity

With regard to residential amenity, reasonable standards of urban design quality would be achieved for the majority of proposed dwellings:

- Approximately 70% of dwellings would receive at least two hours sunlight daily to living rooms or balconies:

Note that the subject development application has not provided comprehensive analysis of sunlight to dwellings, and consequently that further enquiry was necessary;

This estimate of sunlight to dwellings has involved storey-by-storey analysis of solar azimuths in relation to heights of proposed building elements which would cast shadows across adjacent dwellings, and also incorporates the Land and Environment Court's revised planning principle in relation to sunlight;

Finally, this estimate anticipates that future development of neighbouring properties would not cast significant shadows across north- or east-facing dwellings.

- Configuration of proposed dwellings would provide satisfactory natural cross-ventilation:

Dwellings with a 'single aspect' incorporate 'indented' balconies which have windows on two sides to allow natural cross ventilation.

- Separation distances between buildings generally provide for reasonable privacy:

Dimensions of the central courtyard are sufficient for privacy and to accommodate reasonable outlooks from habitable rooms;

Separation between buildings B and C is less than required, but potential for cross-viewing could be remedied by exterior screening.

- The development incorporates a reasonable mix of dwelling types and sizes:

Approximately 50% have one bedroom, 40% are two bedroom, and 10% have 3 bedrooms;

Although dwelling mix is most-appropriately determined by market factors, the proposed mix is not inconsistent with the *HDCCP* which requires at least 10% of each dwelling size;

Notably, discussion of dwelling size downplays additional diversity which would be achieved by factors such as proposed inclusion of studios or varied locations within the development.

However, some aspects of residential layouts provide for less-than-desirable levels of amenity and design quality. The following concerns could be remedied by design amendments:

- i Living rooms in numerous north-facing dwellings offer limited outlooks and receive less-than-desirable levels of sunlight:

Northern walls of these dwellings accommodate bedrooms rather than living rooms;

Living rooms which are located 'in-board' allow a single outlook towards the east or the west;

Relocation of living rooms to an outboard location would allow increased sunlight as well as outlooks in two directions, although efficiency of floor plans would be reduced in order to accommodate short hallways behind the relocated bedrooms.

- ii Numerous dwellings have living rooms with sizes that are not proportionate to the number of bedrooms:

Living room dimensions of approximately 3.5m by 6.5m apply to standard one bedroom dwellings as well as to numerous two bedroom dwellings;

Although these dimensions are satisfactory for one bedroom apartments, they would struggle to accommodate larger tables and couches which typically are demanded by residents of two bedroom dwellings.

- iii Configuration of north-facing dwellings at the internal corner of building C would allow cross-viewing and transfer of living room noise to bedrooms of the adjacent west-facing dwellings:

Impacts relate to unavoidable proximity between windows and balconies: less than 1m;

Acoustic impacts from living rooms and balconies would not be remedied by screening of bedroom windows, and there is no opportunity for reorientation of opposing windows;

The logical remedy is to amalgamate adjacent apartments.

-
- iv Building C has corridors and lift access which are not appropriate for the number of dwellings which would be served:

Common corridors have overall lengths of nearly 45m, with a single lift located at their northern end;

Serving up to 15 dwellings per level, length of these corridors would not encourage social interaction between residents;

Also, a single lift is unlikely to provide satisfactory service for 63 apartments over five levels;

Adjacent to the lift shaft, internal lobbies do not offer natural daylight or ventilation, and social interaction between residents would not be encouraged by the modest dimensions of these lobbies together with their internalised location.

- v Fire egress from level 5 in building B is not consistent with BCA requirements:

Only one means of egress is provided, and maximum travel distances from a sole occupancy unit to that egress exceed 6m;

Reconfiguration of apartments B501 and B504 is likely to be required.

Technical matters

Plans and documents provided by this development application are not sufficient to confirm impacts:

- i The extent of non-compliant building heights is unclear:

A comprehensive survey plan, together with an axonometric view of buildings showing elements which project beyond the LEP height plane, should have been provided.

- ii Visual impacts from easterly and south-easterly directions are not illustrated:

Three dimensional montage views should have been provided.

- iii Levels of sunlight to proposed dwellings are not illustrated:

Axonometric views from the north-east and north-west, illustrating shadows at hourly intervals on June 21, should have been provided.

Brett Newbold
MURP, B. Arch
2 April 2014