

DESIGN VERIFICATION STATEMENT

21st November 2016

Prepared to accompany a Development Application submitted to Liverpool Council.

Project Site Address:

**The Bindery
28 Shepherd Street, Liverpool NSW**

Project Number

120597

Prepared on behalf of

Coronation Property Co Limited

Prepared by

**WOODS
BAGOT™**

THE BINDERY, LIVERPOOL - DESIGN VERIFICATION STATEMENT

Pursuant to Clause 50 (1A) of the Environmental Planning and Assessment Regulation 2000, Woods Bagot Pty Ltd is a registered architect in accordance with the Architects Act New South Wales 1991. The Nominated Architect is Domenic Alvaro Registration number 7445.

Wood Bagot Pty Ltd is the architect for the residential flat development stated above and in my professional opinion the design is generally in accordance with the design quality principles set out in Part 2 of the State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development. We have provided further detail on the design's compliance with the design quality principles outlined below.

Please do not hesitate to call if you have any queries.

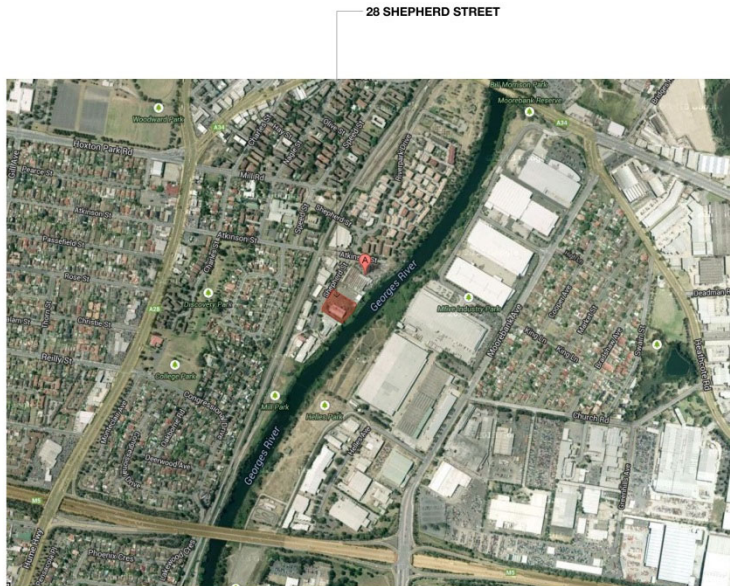
Yours sincerely,



cc. Coronation Property Co Limited

SEPP65 STATEMENT

PRINCIPLE 1: CONTEXT AND NEIGHBOURHOOD CHARACTER



01 – Aerial of site



02 - View of existing structure on site

The property address is 28 Shepherd St, Liverpool, NSW. The lot is approx. 70.6m in width by 85.0m in length on the north and 76.8m on the south.

The existing building on the site consists of an industrial structure that was once used as a storage facility for the heritage Mill Building, located on the nearby 20 Shepherd Street site. Its heritage value and character is addressed by the heritage report under this Development Application. The design presented in this Development Application incorporates the structure's adaptive reuse by integrating its structural members into the landscape design of the communal courtyard as a reminder of the site's unique industrial past. The detail design of its reuse is addressed in the landscape drawings and report.

The site is located in the Liverpool city centre and is within 15 minutes walking distance to the CBD and Liverpool Train station. Shepherd Street functions as a public access road to the Casula Power Station to the south and Light Horse Park to the far north. It is also a short 15 minute drive to the proposed airport at Badgerys's Creek. The surrounding context on the immediate north is an industrial lot; light industrial warehouse buildings on the east and south; and finally, the tranquil Georges River on the west.

The proposed development supports the vision of the Liverpool council to improve the quality of architectural design in the area and specifically sets out to meet the stated objectives contained within the Liverpool Council Planning Controls and SEPP 65. The design aims to build upon those objectives in order to make a key contribution in this significant sector of Liverpool by providing a new high quality residential development integrated within the existing urban fabric.

The two proposed new residential buildings have been configured to provide a strong street frontage to Shepherd Street on the east and a generous setback from the Georges River on the west.

A public through-site connection is provided as a 6m wide road, graded to be gently sloping from the Shepherd Street boundary across the site to the Georges River. This also functions as an expansive visual corridor to the river.

Vehicular access, waste loading services and below-grade parking entry to the residential courtyard are accessed from this drive way. The off-street parking entry is designed into the southern ground floor façade of Building C2 and the loading entry is designed into the southern ground floor façade of Building C1.

Pedestrian safety has been considered by locating the basement carpark entry closer to the street, minimising the potential overlap of pedestrian movement and vehicular activity. The loading dock is located further in the development as the use of the loading area will occur at significantly lower intervals than the use of the car park entry, minimising the potential conflict of pedestrians and vehicles.

Residents have the option to enter the site through the lobby on Shepherd Street and through the courtyard to Building C2.



PRINCIPLE 2: BUILT FORM AND SCALE

The scale and built form of the existing context includes a number of double to triple height industrial warehouse buildings that are well within the maximum building height set out in the Liverpool LEP 2008. However, this is gradually evolving as the site is located within an urban renewal precinct made up of industrial properties that have been zoned for high density residential development such as the recently approved 'Paper Mills' on 20 Shepherd Street, 420 Macquarie Street and 1-3 Bigge Street.

The proposal is for a multi-unit residential development consisting of two separate buildings of varying heights which respond to the scale and form of the streetscape and river views. The proposed distribution of density is composed of a 6-storey building along Shepherd Street and a taller 7-storey building facing the Georges River.

Building C2 – Shepherd Street Frontage

The building parallel Shepherd Street includes double height townhouses facing Shepherd Street. This building is referred to as "Building C2" and has a minimal setback from the street to strengthen its street frontage and relate to the low scale character established by the existing heritage Mills building located on 20 Shepherd Street. Building C2 also mediates the scale between the lower height of the industrial warehouse buildings and the taller height of Building C1.

The two storey townhouses are framed by a strong brick articulated pattern and deep recessed glass façade lines. Privacy is provided by landscape setbacks filled with hedges and plantings as well as a private terrace.

Building C2 is a brick building that relates to the brick textures and colours of the Paper Mills Heritage building. Balcony expressions are modulated by a series of full height vertical slots; a rhythm of large openings and slim bands of glass balustrades; and a toothing effect at the ends of each alternating floor to reduce the solidity of the edges.

Building C1 – Riverside Frontage

The building parallel the Georges River is seven storeys in height and also includes double height townhouses facing the river. Building C1 is bifurcated into two building forms and connected by fully glazed sky bridges at some of the floors to provide expansive views of the courtyard and the river. The two storey townhouses are framed by a strong stone articulation and deep recessed glass façade lines. This building is referred to as "Building C1" and has a generous landscape setback from the river. Privacy is provided by the deep landscape zones filled with hedges and plantings in front of the private terraces. The generous landscape setbacks are stepped in tiers as the landscaping slopes towards the river to meet the existing ground levels as well as the inner 50% VRZ riparian corridor to ensure minimal harm done to the waterfront land as a consequence of the development.

Situated between Buildings C1 and C2, is a spacious residential courtyard with a landscape design inspired by the geometry of the existing industrial structure. The existing structural truss and beam members are inlaid into the ground plane to stitch or "bind" the two buildings together. The shapes captured within the inlaid structural elements reveal a variety of uses – outdoor seating areas and weathered steel and brick planter boxes with plantings of various heights and colours. Privacy is provided for the single storey apartments facing the courtyard with landscape setbacks in the form of these planter boxes filled with hedges and plantings as well as 2m deep private terraces.



04 - View of Building C2 facing Shepherd Street



05 - View of Building C2 facing the courtyard

Both buildings have a palette of materials inspired by the archaeology of the contextual site. A language of weathered materials is adopted into the architectural design. Brick and weathered steel are inspired by the materials of the Heritage Mill Building located at 20 Shepherd Street. Introduced into this palette are stone and metal panels in a rich variety of subtle colours and patterns that strengthen the building colour identities and materiality.



06 – Aerial view of proposed development and proposed materials

PRINCIPLE 3: DENSITY

The project provides an apartment density that is appropriate and consistent with multi-unit residential apartment developments common within the Liverpool CBD context.

The proposed building offers 140 residential apartments with a mix of one, two and three bedrooms. The proposed density will positively contribute to meeting the housing targets of the Liverpool City Council.

This apartment mix is generally in accordance with the Liverpool planning guidelines. 10% of the apartments are adaptable for people with disabilities and are distributed in both buildings.

Residential amenities include oversized and fully glazed double storey lobbies which add to the visual permeability of the ground plane. Both buildings also have communal roof gardens. The roof landscape design consists of raised planters to allow for lush greenery and sunken seating areas for visual privacy as well as reduced wind exposure. The rooftop of Building C2 also has open areas for recreation facilities such as table tennis and BBQ spaces.

The higher elevation of the rooftop of Building C1 is framed by architectural roof elements to provide wind protection and areas of shade during summer months. These architectural frames also add visual prominence to the building's forms. 70% of the protected roof gardens of Building C1 achieve a minimum of 2 hours of solar access on 21 June.

PRINCIPLE 4: SUSTAINABILITY

The project adopts passive environmental design solutions and appropriate use of materials to provide a simple yet effective response to the environmental requirements. A balance of solidity in concrete and brick materials for good thermal performance and glazing for natural daylight is inherent to all facades whilst deep balcony reveals and privacy side walls provide passive shading and privacy where appropriate.

Operable windows are provided to all living and bedrooms. 61% of the total apartments including the living, dining and kitchen achieve natural cross ventilation with operable windows at either end of the space. This is achieved with ventilation slots in the façades and corner apartments.

The lift lobbies and residential corridors for both buildings have operable windows to enhance the cross ventilation of these common area spaces.

On 21 June, the winter solstice, 64% of total apartment living spaces achieve solar access of a minimum of 2 hours or more from 9am to 5pm, as result of also providing apartments maximum orientations to the river. Approximately half of the total apartments have views to the internal courtyard.

All living areas and a majority of bedrooms have full height sliding glass panels to balcony areas.

Substantial landscaping is provided on the ground plane and the total deep soil comprises 29% of the total site area. Landscape species are appropriate to the locality and have been designed to meet minimal water requirements. The landscaping on the roof tops also assists in urban heat mitigation and increases thermal performance.

Energy efficient fittings & fixtures

Energy efficient fittings such as low energy LED and compact fluorescent lighting and 5 star energy rated appliances will be provided to all common areas.

Rain water harvesting and reuse

Harvesting of rain water in tanks is being proposed and will be included if necessary by the consenting authority. Water storage tanks located in the basement would be used for rain water collection and reused for irrigating gardens.

To treat the site's stormwater run-off, a WSUD swale is designed for the eastern edge of the site.

Water efficient fittings and fixtures

Water efficient fittings such as restricted water flow shower heads and dual flushing toilets will be provided to all residential apartments and common areas.

PRINCIPLE 5: LANDSCAPE

The development aims to maximise communal open areas and landscaping at the ground level courtyard, roof top gardens and within the landscape zones the facing the river and Shepherd Street. The total percentage of deep soil is 23.4% of the site area.

Communal outdoor amenities are located on the roof tops of both buildings. The apartments will benefit from year-round outdoor access to large private balconies. New street trees will be planted along Shepherd Street in accordance with council's landscape strategy.

Please refer to Aspect's landscape drawings and report for the scope of landscape design and details.

PRINCIPLE 6: AMENITY OF THE PROPOSAL FOR ITS USERS

Apart from achieving the required mix and compliance with much of the SEPP 65 guidelines, the fundamental design goals of this proposal have been:

- To maximise access to river and courtyard views
- Prioritise the living rooms for amenity
- Ensure fresh air and daylight to common areas
- Create memorable experiences in the entry sequence to the development, expansive building lobbies and private communal open spaces.

The proposal includes efficient and spacious apartment layouts, access to sunlight, natural ventilation, visual and acoustic privacy, storage, double storey sky bridge recreation spaces, outdoor roof gardens, efficient layouts and service areas and outlook and ease of access for all age groups and degrees of mobility where required.

Common area corridors and lift lobbies have been designed with access to natural daylight and fresh air. Ground floor lift lobbies are double storey in height and fully glazed to enhance views through the ground plane. Building C1 also provides a unique amenity called “sky bridges” that will be used as indoor but fully ventilated residential recreation spaces with expansive views to the courtyards and river.

Each apartment has been designed with modern open plan living areas comprising of the kitchen, dining and living areas. Each living space has direct access to a full height and full width glass sliding door panels and windows with direct access to outdoor balconies or terraces.

The majority of the kitchens measure 8m from a window to the back of the kitchen splashback. Those that deviate from this dimension are located on the ground and first levels as these apartments are either double storey townhouses or oversized apartments. Full kitchens are provided with appropriate storage and sufficient bench or island bench areas for cooktops, basins and for preparation, cooking and display. Each apartment has good sized bedrooms capable of accommodating a queen size or larger bed. Each bedroom has full height robes and access to an operable window, and smaller high level windows in some instances.

All bedrooms have a minimum clearance of 3m or more in width. Each 1 bedroom unit has access to 1 shared full sized bathroom whereas each 2 bedroom unit has at least 1 Ensuite bathroom. Double width laundry cupboards or rooms with basin are provided. Each laundry can accommodate a dryer, washing machine, sink and good storage for a clothes bin, ironing board and cleaning products.



07 – River view from Building C1 Residential Lobby



08 – Skyline view from Building C1 Residential “Sky Bridge”



09 – Internal common area circulation

PRINCIPLE 7: SAFETY AND SECURITY

The main pedestrian entrance to Building C2 is located on Shepherd Street and the main pedestrian entrance to Building C1 is via the courtyard. Both buildings will operate on a secure card controlled glazed door access. The main vehicular access to the residential car park is located off the driveway on the south of the site and via a secure card access control to operate a roller shutter. Sight lines from the apartments provide visibility for safe and secure access to the lobbies, courtyard and car park entry. Additional security will be provided by a fence located at the entry of the courtyard and will operate via secure card access control.

Security will be maintained via a secure lobby entrance off Shepherd Street with a monitored security room, CCTV surveillance and card access to lift cores. Lighting along boundaries, in lobbies and communal areas to maximise resident safety will be provided.

PRINCIPLE 8: HOUSING DIVERSITY AND SOCIAL INTERACTION

The proposal caters for a cross section of the suburban demographic in terms of density and affordability with the provision of 38% x 1 Bedroom apartments, 56% x 2-Bed apartments, 5% x 3 Bedroom and 1% x Studio apartments. Double storey townhouses are located on the ground floor on Shepherd Street and the river side to also add diversity to the residential typology.

The development also provides a mix of private open space in the form of large terraces and balconies and a communal rooftop terraces with substantial planting catering for both formal and informal recreational activities. The inclusion of accessibility features such as level footpaths and disability access at ground level caters for the varying degrees of accessibility in the general population. BCA and DDA compliance reports are attached with the development application and the design reflects these reports.

PRINCIPLE 9: AESTHETICS

The architectural articulation, scale, mass, built form and materiality of the development are a direct response to the archaeology of the existing site, specifically the site's location near the former paper mill factory founded in 1865. The design appraises a narrative that embeds the patina and history of the contextual materials and highlights an emergent urban grain in a new residential precinct.

Building C2 located on Shepherd Street is low in scale and brick to address the emerging residential character and scale of the street. The setback from the boundary is minimal and double storey townhouses face the street to strengthen the Shepherd Street frontage. A single storey glazed lobby with views through to the courtyard and the glazed lobby of the riverside building welcome visitors and residents. This building is composed of brick with glazed balustrades. A horizontal rhythm of staggered punched balcony and window openings form an articulated pattern for private outdoor spaces and also function as privacy screens. This composition of enlarged openings "tooth" at the ends to soften the solid edges.

Building C1 located on the river side is taller in scale with its roof frame articulations to provide a prominent presence to the river's edge. The design strategy to reduce the building's bulk is to bifurcate the overall volume and connect them with double storey sky bridges. Each volume contains a floor plate of 6 apartments and has its own dedicated core and lift lobby. Its bulk is further reduced by a series of vertical and horizontal slots. Each building volume has its own series of colours of aluminium metal panels in varying size formats to enhance the material's tonal range as well as provide each volume with a unique colour identity and character. The north volume has a tonal range consisting of golds and the south volume has a tonal range consisting of bronzes. Finally, the riverside building is highlighted by single, double and triple storey roof planes that act as architectural frames to the roof gardens as well as provide weather protection. Large apertures are cut into the roof and north facing wall planes of these frames to provide solar access in some areas. 70% of these areas achieve a minimum of 2 hours of solar access on 21 June.