ATTACHMENT E

Feasibility and design report

Feasibility + Design Report Glebe Affordable Housing Demonstration Project

For City of Sydney + Housing NSW

25 May 2009





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Affordable Housing Joint Demonstration Project For The City of Sydney + Housing NSW

Feasibility + Design Report

The City of Sydney + Housing NSW Affordable Housing Joint demonstration project at Glebe aims to deliver a range of more affordable housing for key workers within walking distance of the City. The project is an initiative City of Sydney, Sustainable Sydney 2030 and is supported by the Memorandum of Understanding between the City of Sydney and Housing NSW.

This housing demonstration project is in response to bold Sustainable Sydney 2030 targets to redress the increasing shortage of affordable housing stock and choice. It is hoped this project could then be adapted to increase well located affordable housing throughout Sydney and indeed Australia.

Sustainable Sydney 2030 proposes that 7.5% of dwelling stock be affordable by the year 2030. Related objectives include promoting delivery partnerships and diversifying the housing choices available.

This Feasibility + Design Report outlines architectural and urban design considerations in the preparation of a concept plan for feasibility study and costing.

This report should be read in conjunction with other reports prepared by the consultant team, including stormwater + flood mitigation, ESD, heritage and feasibility.

This report is separated into several sections identified in the contents. The work is underpinned by place based (1) URBAN ANALYSIS and (2) URBAN STRATEGY. An expanded and improved (3) PUBLIC DOMAIN is considered essential to successful urban place making.

The housing strategy for both sites is outlined in (4) SITE + HOUSING DESIGN and is presented in more detail in (5) DOH SITE (Housing NSW) and (6) COS SITE (City of Sydney). Housing precedents in (7) RESEARCH informed the work through historical and contemporary examples. Section (8) COS DEPOT outlines proposals for several configurations of a new City of Sydney Depot on the project site.

Section (9) STATUTORY PLANNING proposes revisions to the existing development controls for this part of the City of Sydney to better acknowledge the areas walking proximity to the City, structural public transport and diverse urban amenity and it's suitability to increased housing density and a range of supporting uses.

25 May 2009 scale



Executive Summary



Affordable Housing Joint Demonstration Project For The City of Sydney + Housing NSW

Urban Analysis







1.1 **Aerial Photograph**

The site is outlined in yellow. The aerial photograph reveals the broad layout and built form of the surrounding area. To the east, Ultimo can be characterised by its rectilinear grid, long blocks, and juxtaposition of large scale warehouse buildings against small scale terrace housing. To the west, Glebe is defined by radial streets traversing the fall by the shortest route and a grid of cross streets which follow the contours. Short blocks and many lanes make Glebe very permeable for pedestrians. The built form is mostly low scale one and two storey housing with the notable exception of the 13 storey John Byrne Court T-shaped tower. To the north, Wentworth Park provides open space of a regional scale, but is intruded upon by the presence of the greyhound track and grandstand.

The area to the south of the sites and bounded by Cowper Street, Parramatta Road and Wattle Street is varied and less easy to define. This area has undergone piecemeal redevelopment over the past century and hosts a great variety of buildings from terraces, two storey townhouses and three storey walk-ups, through industrial warehouses, residential and commercial warehouse conversions to new medium rise apartment buildings, big box retail and car parking structures and new residential towers. Radial streets structure the area similar to Glebe, however the blocks are not regular in length or dimension. Connectivity and permeability is generally better in an east to west direction, than north to south.

The Housing NSW and City of Sydney Depot sites are anomalous in the area for their large block size and single ownership. They act as blockages to movement east to west and north to south and need to be reduced in size by the introduction of new streets and public domain elements.



Affordable Housing Joint Demonstration Project For The City of Sydney + Housing NSW

Urban Analysis



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1.2 **Historical Context**

This plan is a detail from City Building Surveyor's Detail Sheets 1949 from the City of Sydney Archives. Examination of historical plans enables an understanding of a site's past, how it has changed over time and puts future change in perspective. This plan shows both the City of Sydney site and Housing NSW in a state of change. The City of Sydney Depot site is shown prior to the construction of the current depot building in the south east corner. Several other ancillary buildings have also been removed, added to or altered in the past 60 years. The Housing NSW site captures a time that is half way through the construction of the current estate. Additional streets are present and several of the blocks are shown as vacant anticipating new buildings.

West of Cowper Street, Glebe remains relatively unchanged to today. This area is still characterised by a predominance of Victorian terrace housing and Art Deco freestanding housing and duplexes.

The area to the south of the site is predominantly comprised of terrace housing west of Bay Street, and warehouse buildings to the east. Whilst the built form has remained largely intact, the building use has moved from light industrial towards commercial and residential. Of note is the large vacant lot to the south of Glebe Street and neighbouring lots to the west, which is now occupied by a low-rise Housing NSW estate. Also, the block bounded by Macarthur, Mountain, Kelly and Bay Streets, which was occupied by City of Sydney Depot amongst others, now accommodates City of Sydney Affordable Housing built in the 1980s and the International Grammar School.

Ultimo, to the east of Wattle Street has some minor changes to built fabric. Several warehouse and terrace rows have been replaced by low-rise apartment buildings. The large scale warehouses on Wattle Street have also been adaptively reused as apartment buildings.

To the north of the site, a Kindergarten can be seen in the centre of Wentworth Park which no longer exists. Also of note is the block north of Wentworth Street, facing Wentworth Park, was previously owned by State Government, is now in private ownership.



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Affordable Housing Joint Demonstration Project For The City of Sydney + Housing NSW

Urban Analysis



25 May 2009 scale: 1:7500



1.3 **Urban Context**

The site is comprised of two large blocks either side of Bay Street, Ultimo. The eastern block is owned by the City of Sydney and is bounded by William Henry Street to the north, Wattle Street to the east, Macarthur Street to the south and Bay Street to the west. It is currently an operational Council depot. The western block is owned by Housing NSW and is bounded by Wentworth Street to the north, Cowper Street to the west, Bay Street to the east and is bisected by Elger Street. It is currently occupied by low rise 1960s Housing Commission apartment blocks.

The site is very well located. It is within a 20 minute walk of all of the services and employment of the City Centre and City Fringe.

The large open space of Wentworth Park is immediately to the north whilst Victoria Park is at the south end of Bay Street. Several smaller neighbourhood parks can be found in the adjacent blocks.

Central Railway Station is within walking distance, many bus routes operate along Parramatta Road, and the light rail is close by, running through the north end of Wentworth Park.

Ultimo Public School, International Grammar School and Sydney Secondary College are within 5 minutes walk of the site, whilst the larger institutions of Sydney University, the University of Technology, Notre Dame University and Ultimo TAFE are also situated near by. Glebe Point Road, Broadway Shopping Centre, Chinatown, Market City and the Sydney Fish Markets provide good quality retail in close proximity.



WALKING AND BICYCLE RADII 2m CONTOURS

SPECIAL USES

POLICE STATION





















Urban Character

25 May 2009 scale: 1:4000

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Urban Analysis



25 May 2009 scale: 1:2500



1.5 **Existing Urban Form**

The local topography is varied. To the west of Bay Street, Glebe is hilly with the Housing NSW site sitting on the slope of a minor spur. The area of Ultimo between Bay Street and Wattle Street is predominantly flat whilst to the east of Wattle Street, the land rises very steeply up to the ridge of Bulwara Road.

The largest existing trees can be found at the perimeter and centre of Wentworth Park. Glebe, to the west of Bay Street, is relatively green with many established trees in street reserves and the centre of residential blocks. To the east of Bay Street, tree locations are sparse and patchy. Only Mountain Street has a reasonably consistent line of street trees whilst select residential apartment developments provide some courtyard planting.

The building types neighbouring the site are many and varied in height, form and use. Yellows, oranges and reds indicate residential buildings, browns indicate industrial warehouses, blues indicate public and commercial buildings and green shows landscaped open space. Low rise attached residential types are present immediately to the west in Glebe, large scale warehouse buildings exist to the east, whilst a combination of low rise residential, warehouses and medium rise apartments are adjacent to the south. To the north is a single block containing a low rise industrial warehouse and then Wentworth Park.

EXISTING TREES OPEN SPACE

SOFT OPEN SPACE HARD OPEN SPACE

BUILDING TYPES

SINGLE HOUSING

SINGLE HOUSING FREESTANDING

APARTMENTS BIG HOUSE TYPI TOWNHOUSES WALK UP (2/3 st

APARTMENT BUILDINGS (4+

APARTMENT TOWER (12 st)

WAREHOUSE LOW RISE (1/2 :

WAREHOUSE HIGH RISE (3+ : PUBLIC / COMMERCIAL LOW RISE (1/2 st PUBLIC / COMMERCIAL HIGH RISE (3+ st

Affordable Housing Joint Demonstration Project For The City of Sydney + Housing NSW

Urban Strategy



25 May 2009

scale: 1:2500



1.6 **Existing Built Height**

The building heights surrounding the site vary from one storey to nine storeys. The amount of storeys has been calculated as residential storeys of approximately three metres in height. Therefore the height of warehouse buildings with storeys of four metres plus are not necessarily reflective of their actual storey height. The lightest blues indicates the least storeys through to the darkest purples which indicate the most.

West of Cowper Street, building height is uniformly one and two storey with the single exception of John Byrne Court standing at thirteen storeys. East of Wattle Street, warehouses approximating nine residential storeys meet two storey residential terraces. South of the council depot site, building height is mid-rise, ranging from two residential storeys to six. South of the Housing NSW site a pocket of one to three storey residential exists which then increases in height towards Parramatta Road. North of the site the warehouse is one and two storeys high.

The buildings currently occupying the Housing NSW site are predominantly three storey walk-up apartment buildings. The structures on the depot site are of one and two storeys with the exception of a three storey warehouse fronting Bay Street which approximates five residential storeys.



BUILDING HEIGHT

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Urban Framework



25 May 2009 scale: 1:5000





2.1 **Urban Strategy**

Bay Street - Park to Park

Bay Street should be recognised as the main street in the layout and reinforced as a 'green link' connecting the two major open spaces of Wentworth Park and Victoria Park. Street tree planting and public domain improvements such as bicycle lanes would enhance this connection.

New Streets

Both of the subject sites are currently large blocks in single ownership. This has served current uses, namely a Housing NSW residential estate and a City of Sydney council depot. However, if the sites are to be redeveloped, there exists the opportunity to expand the public domain. Both sites present significant blockages to movement which can be addressed through the introduction of new streets. New local streets will integrate these blocks into the neighbourhood and improve building address.

Blackwattle Lane - Blue Link

The alignment of Blackwattle Lane is evident in the Depot subdivision and follows the rough line of Blackwattle Creek (shown dotted in light blue). The edges of Wentowrth Park approximate the original shoreline. This extended and expanded lane i as a 'blue link' terminating at Blackwattle Stand making water movement explicit in the groundplane, which could handle stormwater management, treatment + reuse .



HISTORIC SUBDIVISION

POTENTIAL STREET / LANE CONNECTIONS

OPEN SPACE

BUS ROUTES

SPECIAL USES

SECONDARY



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Urban Framework



HISTORIC SUBDIVISION Boeckl, M., 'Public Spaces - Boris Podrecca', Wiener Stadtische, 2004, p123 Aerial Photo c1930s

Gehl, J., 'New City Spaces', The Danish Architectural Press, 2001, p46

Dreiseitl H., 'Waterscapes', Birkhauser, 2001, p85

25 May 2009 scale: NST





Cerver, F., 'Redesigning City Squares and Plazas', Hearst Books, 1997, p33



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Urban Framework



25 May 2009

scale: 1:2000



2.3 Holistic Site Approach

Key initiatives for the transformation of the Ultimo/Glebe blocks include :

-Place based urban consolidation to deliver a range of more affordable housing for key workers within walking distance of the City;

-An expanded public domain of new streets and walkways to improve walkability and include water sensitive urban design measures; and

-New street edge buildings with multiple building entries and a mix of uses to provide positive frontage to and oversight of, the public realm.

This drawing shows three potential building layouts that can occupy the building envelopes proposed for the site. Three building types have been developed. Block D1 is social housing and complies with Housing NSW mix and brief. Block G1 and G2 is affordable housing and demonstrates a layout for the typical 16.2m deep envelope across the site. Block F1 is market housing demonstrating a layout suitable for the proposed towers. All layouts are highly SEPP65 compliant. These layouts have been measured and used to generate the envelope to unit efficiencies used in the brief and yield spreadsheets (4.2, 4.3, 5.2, 5.3)

2 9211 6276 F 02 9281 317 ARCHITECTURE + URBAN PRO IECTS PTY ITC

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