

Draft Master Plan

October 2005



ELYARD GARDENS

masterplan

The Elyard Gardens proposal aims to contribute to the process of achieving the aims and objectives of the Narellan Township Masterplan, which sees that the Narellan Township will evolve as:

“.....a dynamic, accessible, contemporary, mixed-use centre, which respects its environmental and heritage contexts and capitalises on its setting. It will be the principle commercial/retail centre in the Camden Local Government Area, a major employment node and provider of diverse residential opportunities.”

Elyard Gardens will provide high quality medium density housing in a garden city environment and a retail/commercial/residential edge to the new Elyard Street 'Main Street'.

The Elyard Gardens proposal is an exciting opportunity in this rapidly developing area. It will utilise the latest thinking and technologies in the fields of architecture, landscape and urban design and ecological sustainability.

This masterplan will provide the basis for a groundbreaking project, which will initially integrate into the existing town structure but also represent a benchmark for future development in the area.

The result will be a vibrant, diverse estate, which will present people with housing choice and a pleasing setting to live, learn, work and play.



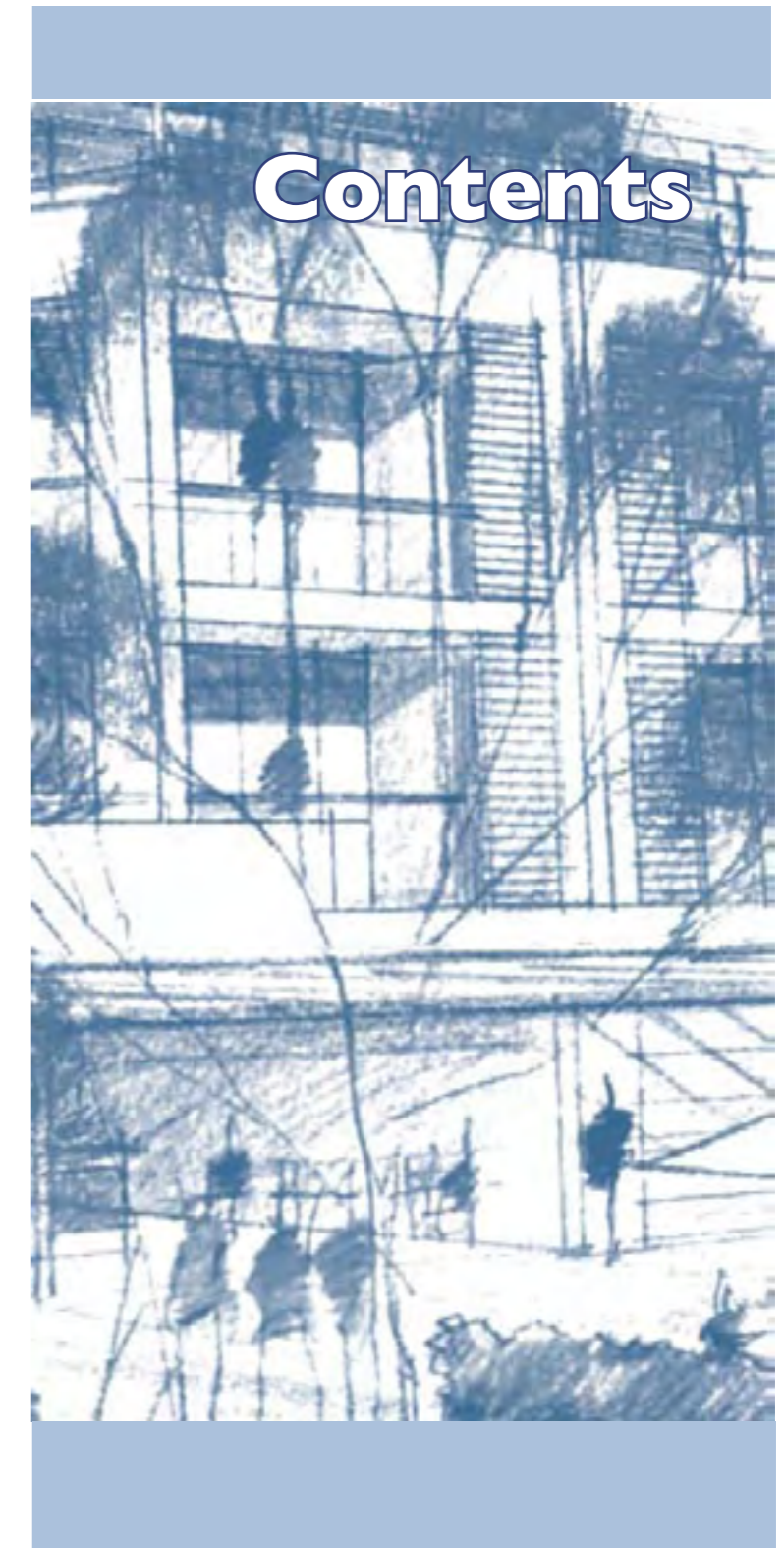
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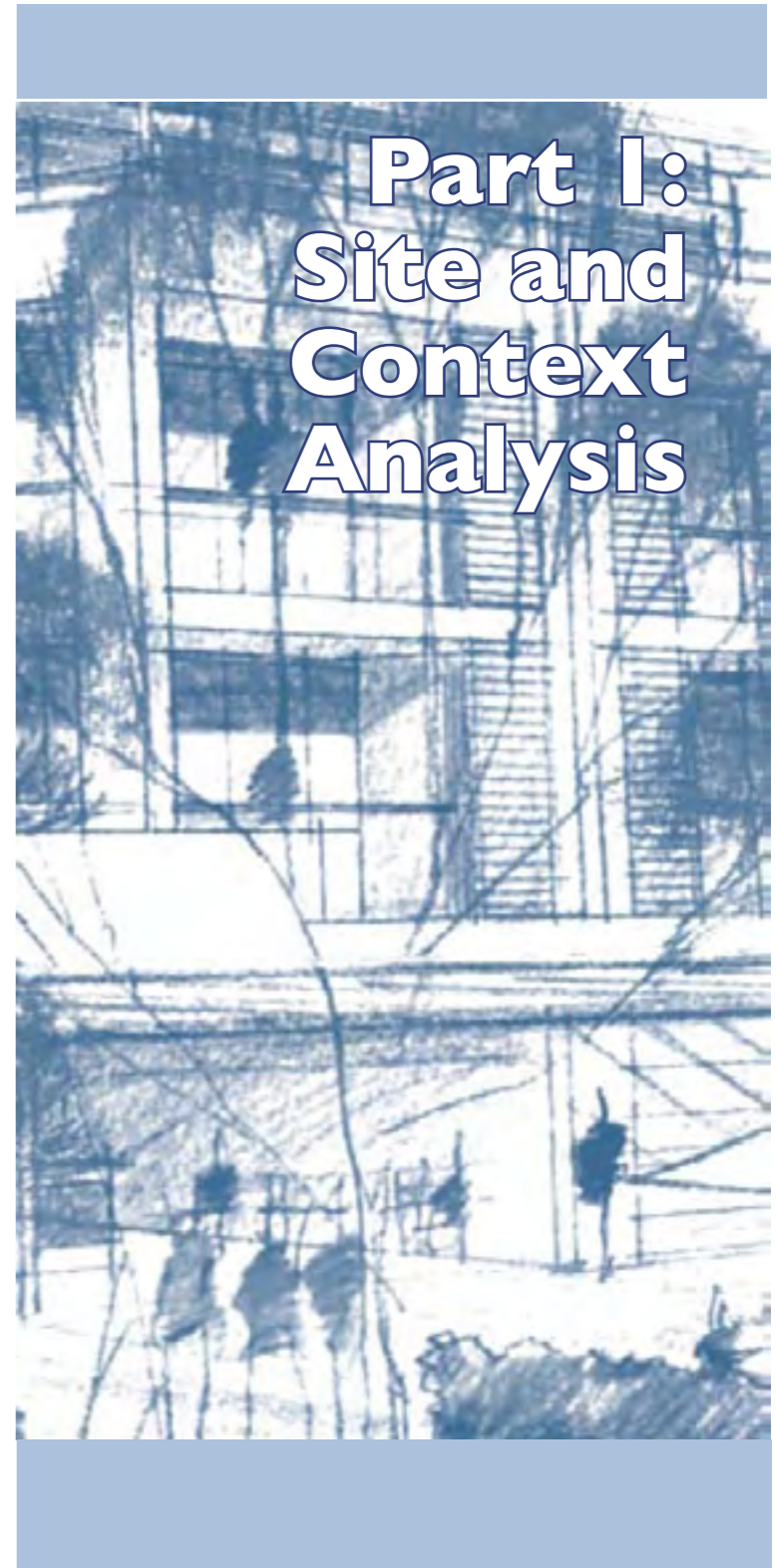
Production

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Introduction

A consortium of local business people and developers has been formed to develop this strategically located site within the Narellan Town Centre for a mixed-use commercial and residential development. This Masterplan documents a vision to guide the realisation of this major new urban development project. It represents the culmination of background work and consultation conducted over a number of years, which set the context for development, and reflects the involvement of Camden Council and to some extent the community during the public exhibition of the Narellan Township Masterplan.

The Masterplan has been developed as a vision encompassing 'Elyard Gardens', as well as the community facilities located in the 'precinct'. The Masterplan proposes a number of holistic urban design principles that integrate and unify the different elements, specifically:

- Creating a 'strong' edge to Elyard Street that is well defined and active;
- Creating a 'softer' more sinuous edge to the Council site (Parks Depot) and Town Park, which will be created between this site and the library building;
- Creating strong linkages within the site north to Elyard Street, the Town Centre, as well as to the Council site and library facilities;
- Creating a lower scaled edge to the surrounding existing residential areas towards Leicester Street.

The Masterplan does this by:

- 'Drawing in' the landscape elements from the surrounding area into the heart of the scheme;
- Exploits the site's existing contours to optimise height while minimising its impact on the surrounding context;
- Optimises the site's northern aspect by maximising north facing apartments;
- Creates a strong active address on Elyard Street;
- Connecting strongly to Council's facilities by providing easy access for residents;
- Connecting strongly to Elyard Street by providing easy access to shopping and commercial activities located in the Town Centre and accessibility to employment and transport nodes.

This Masterplan provides details of the future development of the Centre, and indicates the preference for higher residential densities in the Elyard Street precinct. The land is part of a much larger development scenario for Narellan as envisaged in the Council adopted Masterplan, with development opportunities for a number of similarly strategically located sites. The Masterplan identified the following land uses that could occur on the land, as follows:

- Mixed-use, commercial uses to street front with medium density housing in the rear and above;
- Public open space;
- Two to four storey medium density housing sensitive to old brick pit site subject to site specific Masterplan; and
- Medium density residential area.



Part I: Site and Context Analysis



Figure I -Masterplan

The site sits within an established context of district facilities – shopping mall, commercial and retail facilities, community facilities (library), recreational pursuits (golf course, tennis courts and sporting field) and educational centres. Industrial employment is located with the Narellan Industrial Estate to the northwest. Stage 4 of the Narellan Town Centre Shopping Centre will provide additional shopping facilities and a cinema complex. Narellan is the 'hub' of the greater Camden district. The burgeoning suburb of Harrington Park and the recently announced South West Growth Centre are located to the north.

It is envisaged that with the extension of Narellan Road through to The Northern Road that Camden Valley Way between Narellan Road and The Northern Road will be 'downgraded' to a 'Main Street' function to allow complementary functions to occur on either side of this road and build on its street based ambience. With new bus interchange facilities and transit lanes on Narellan Road, the community will be well served with public transport opportunities, providing a strong rationale for the location of denser residential development aimed at reducing the high proportion of car usage in daily life.

Numerous studies have been undertaken over recent years into the suitability of the land for development. Many of those studies and related documents contain information relevant to the site's past history of land use, particularly the use for a 'non-putrescible tip'. This tip was located towards the rear half of the site and was formerly the brick pit operation. The technical studies have confirmed that the land overall has urban development potential in the form of residential apartments and commercial land uses.

Council's Desired Future Character Statement

The Narellan Township will evolve as a dynamic, accessible, contemporary, mixed-use centre, which respects its environment and heritage contexts and capitalises upon the setting. It will be the principle commercial/retail centre in the Local Government Area, a major employment node and provider of diverse residential opportunities.

As Narellan and its surrounding district grows over time, there will be opportunities for economic development, hence revitalisation within the township will continue to be realised and be a priority.

New development will not copy the buildings of Camden, but will generally reflect the massing and proportions embodied in such buildings.

Development surrounding the Narellan commercial core will comprise uses and building types that support the core's activities, movement patterns and overall viability as an attractive place. ... the supporting fringe will comprise medium density housing with some mixed uses and local businesses on key movement streets.

A substantial part of the site is relatively free of constraints and can be regarded as similar to the adjoining developments. Other parts of the site affected by constraints have been identified for remediation in accordance with SEPP 55 – Contaminated Lands. The subject site is relatively flat and therefore offers opportunities for residential and commercial enterprises to mix together to form the basis of a 'living' centre. The values of the site will be integrated into future development to generate a "Sense of Place".

The important aspect of providing a residential estate is creating a "community" that relates to the "Place" and a sense of ownership, whilst at the same time providing opportunities to live close to work. To ensure that the development achieves these desired outcomes, it must have a "Vision" and a "Desired Future Character (DFC)", as described below. The following is Council's DFC taken from the Narellan Township Masterplan

It is clear from the Desired Future Character Statement that Council has established its intentions for the development of the township with medium density development and mixed-use developments to promote the status of Narellan as the major employment centre of Camden LGA.

This Masterplan will be followed by more detailed development applications, which will interpret the principles, intentions and controls into building forms and into the detailed design of the public domain. The combination of attention to the design and details of buildings, streetscapes, streets and open spaces will distinguish this area in terms of long-term 'town-making'.





Purpose of This Document

The Masterplan establishes the vision for the site and provides a detailed framework to guide the design, development and implementation of this vision. The purpose of the Masterplan document is to:

- Provide a clearly articulated vision for the site that incorporates the community, stakeholders, Council, and the Consortiums aspirations for the site;
- Co-ordinate and guide the development of the site in an ordered manner to achieve the vision;
- Provide an explanation or rationale behind the development of the Masterplan;
- Provide certainty to the community and any future residents in relation to the layout and level of amenity to be provided; and
- Assist those responsible for the preparation of detailed designs and documentation for the public and private domain.

The Masterplan should be interpreted as a guiding document rather than a fixed or absolute plan. Some level of refinement to the detail of the layout and public domain may be required at the detailed design phase to accommodate specific site conditions.

This Masterplan replaces all previous controls that may have applied specifically to this site. Where there is an inconsistency between this plan and any other non site specific policy, the provisions of this Masterplan should prevail, to the extent of that inconsistency.

Investigations and Studies

This Masterplan has been prepared for the Consortium by the following consultant team who have prepared the appropriate plans, reports and studies for this Masterplan. These consultants are experts in their respective fields and the information and recommendations provided in these reports and studies have been drawn on to formulate plans for management and ultimate development of the site.

Architects

Hely Horne Perry Metcalf

Town Planners & Urban Designers

Michael Brown Planning Strategies &
Townscape Urban + Graphic Design

Traffic Impact Assessment Report

Traffix – Traffic and Transport Planners;

Landscape Design

Distinctive Gardens and Interiors;

Acoustic Assessment

Acoustic Logic Consultancy;

Environmental Assessment

Environmental & Earth Sciences;

Stormwater and Water Quality

Lean Lackenby & Hayward (Liverpool)



Local Context

Narellan has a long history and is one of the first towns along the 'Cowpastures'. In past years a railway station was located on part of the area known as "Struggletown", which is located on the northern side of Camden Valley Way. Narellan continues to grow in terms of retail, commercial and industrial activities and its position within the hierarchy is the major centre with Camden Town Centre, which provides a support role.

The Narellan Town Centre provides a mixture of land uses, as described above, but also residential development on the fringe of the centre in the form of single dwelling houses. Medium density development is non-existent despite the relative location of the centre to transport and employment and the premise of having higher densities close to these land uses to reduce the dependency on car travel.

The proposed development is to be known as "Elyard Gardens". The subject land is located on the southern side of Elyard Street and is located between Somerset Avenue and Queen Street and the site is bounded by residential development fronting Somerset Avenue on its eastern side, a public reserve on its southern side (with residential beyond) in Leicester Street. Camden council owns the adjoining land, which is currently occupied by the Parks Depot and further to the west Council's recently completed Library Building and the Administration Building.

The development of this site will provide an opportunity to create an urban built form that will set the benchmark to allow similar sites, within and close to commercial lands in the Camden Council Local Government Area, to be developed for medium density purposes. The site will have a mix of apartments in a layout that focuses on open space areas. There will also be mixed-use development along the Elyard Street frontage to continue the theme of commercial active spaces along this road.

These building design guidelines have therefore been prepared to ensure the final outcome in built form has regard to the surrounding development, but provides a high degree of certainty as to the final outcome and a framework for Council to approve development applications in accordance with this Masterplan.

The intention is that the site should be exceptionally well designed. It should stand out as a special "place" within the general Narellan Town Centre and demonstrate ecologically sustainability in its pedestrian orientation and in the design of the buildings. The Masterplan is intended to guide development over the ensuing years. The Masterplan will create a vibrant place that accommodates a wide variety of activities for people, in and around the Centre, that provides a pleasant pedestrian environment and that has a distinctive architectural character.

The Masterplan sets out to influence the nature of future developments on the site by, for example, prescribing maximum building heights and by specifying that buildings should be built to the required setback, but does not try to dictate exactly how buildings should be designed other than to set a framework for the built form.

The development will be constructed in stages.

The notion of the *liveable neighbourhood* is increasingly becoming a benchmark for both communities and local government. Central to this idea is the belief that the needs of residents for a healthy, convenient, safe lifestyle can be met by well located planned neighbourhoods. This *liveable neighbourhood* provides for enhanced local identity, a wider choice of housing type, supporting local shopping facilities and other amenities, including local employment, and higher levels of public transport usage.



New Narellan Library adjoining the site



Council Administration Building near the site



Care has been taken to develop spaces on the site as part of the Masterplan. Access to apartments can be gained from the secure lobby area of each block, in the case of pedestrians or from the secured basement car parking areas. The housing types encouraged by the Masterplan are apartments interspersed with mixed-use commercial developments along Elyard Street. These are radically different to the housing types available in the vicinity of the site, which are predominately single detached dwellings. The relatively dense development of these apartments permits the large common areas to be formed. The common areas amongst the buildings are intended for passive recreation, whilst communal facilities in the form of a community room, gym and outdoor swimming pool are also provided.

The Government Architect, Chris Johnson, also holds this view. A recent report in the Sydney Morning Herald outlined his views as follows:

"He said urban consolidation – increasing population density to avoid sprawl – did not have to mean an end to the garden city, and Sydneysiders need not fear it.

The debate's been artificially skewed around two diametrically opposed opposites, the suburban house on one hand and concrete 20-storey towers on the other, he said, the truth is in the middle.

He favours housing more people on redeveloped sites in what he calls four-storey garden apartment buildings, no taller than the mature height of native trees planted around them.

Within the canopy of the trees, we can get buildings that are shaded and protected and the feel will be back again of the garden city. You can keep it leafy and what that's good for, especially in western Sydney, is you can lower the temperature. The other thing it does is clear the air."



Development control in this Masterplan have been formulated around 4 storey maximum height limits.

The topography of the site also lends itself to development, which is higher than previously existing in the area. The site rises to the South East and along the Southern boundary two storey townhouses have been located. This prevents overshadowing of the public reserve as well as providing a transition to the generally lower scale residential which exists along Leicester Street. The fall of the land to the North allows the building heights to be increased to 4 storey without infringing on a height plane set by two storey development along Leicester Street. The unit numbers in the four storey buildings allow lifts to be provided and maintained in each building without a major cost burden on the future residents. This is seen as a major benefit for the quality of the development.





Variety in the design of the individual super-blocks will be incorporated along with subtle colour variations and highlights to ensure that the streetscapes and courtyard areas have a lively and interesting expression as residents and visitors move through the spaces.

The changing levels across the site dictate that the heights of the buildings step with the rise of the land contributing to the variety and interest created in the architectural expression of the buildings.

In laying out the site, as well as keeping in mind the SEPP 65 principles discussed below, it was deemed important to make the site understandable to residents and visitors. This is achieved through careful planning of a hierarchy of spaces. These were identified as:

1. Public – consisting of Elyard Street, the retail and commercial space and the car parking that serves it.
This will be a busy vibrant area with the surrounding residents channelled on the street on their way to the library and shopping centre or to catch a bus. Shops such as cafes and Laundromats will be encouraged on the street front retail area as it is expected the residents of the site will patronise these.
2. Semi-Public – This includes the internal streets in the development and the pedestrian connection through the site. They are characterised by well landscaped and lit avenues and pathways. Dedicated visitor parking bays will be provided and the buildings will be brought close to the street boundaries to engage the space. The four storey buildings will provide excellent surveillance of these areas. The reason for calling it semi public is because, while the general public will have unrestricted access to these areas, they will have little reason to go there. It is expected local residents and visitors will be the main users.

3. Private – These are the courtyards between the buildings exclusively for the use of the residents. They will be controlled by pass key access. These areas will be designed and landscaped for passive recreation. The scale of the development also allows the provision of communal facilities for the residents including a pool, exercise room and common room. These are seen as beneficial for building a community spirit on the site.

Site Description

The subject site is known as the 'Build & Fix' site. The legal description is Nos 6 – 8 Lot 6 in DP 812672 and comprises an area of 3.477ha. The subject land is rectangular in shape, which enables the land to be developed in an economic and orderly fashion.





**Part 2:
Statutory
Context**



Camden Local Environmental Plan No 46

The subject land is zoned Part General Business 3 (a) and Part Business Support 3 (b1) under the provisions of Local Environmental Plan No 46 (CLEP 46). The relevant general objectives of the CLEP 46 are set out in Clause 2 as follows:

This plan aims:

- (a) *to promote the retention of, and to enhance, the characteristics of the different localities in which housing is or will be situated within the area of Camden by:*
 - (i) *providing for development that takes into account and promotes the distinctive character and amenity of those localities, and preserves or will create a strong physical and visual distinction between those localities; and*
 - (v) *encouraging innovative and attractive forms of housing and patterns of residential subdivision; and*
- (b) *to provide for a wide range of housing needs by:*
 - (i) *allowing a choice of housing options in each town; and*
 - (ii) *satisfying the housing needs of the community, including socially and physically disadvantaged people; and*
 - (iii) *increasing the density of residential development near commercial and community facilities where satisfactory transport services are available; and*
 - (iv) *promoting more affordable housing; and*
- (c) *to achieve a high quality of development by:*
 - (i) *encouraging a high design quality, which will provide a pleasant living environment; and*
 - (ii) *promoting development suitable to particular localities;*

- (e) *to achieve development which is designed, sited and constructed, using passive solar principles, so as to maximise energy efficiency by reducing the consumption of non-renewable forms of energy for heating and cooling purposes; and*

Comment

The proposal achieves these objectives.



The zonal objectives are set out in Clause 10 of the LEP and are as follows:

The relevant objectives of the 3 (a) zone are -

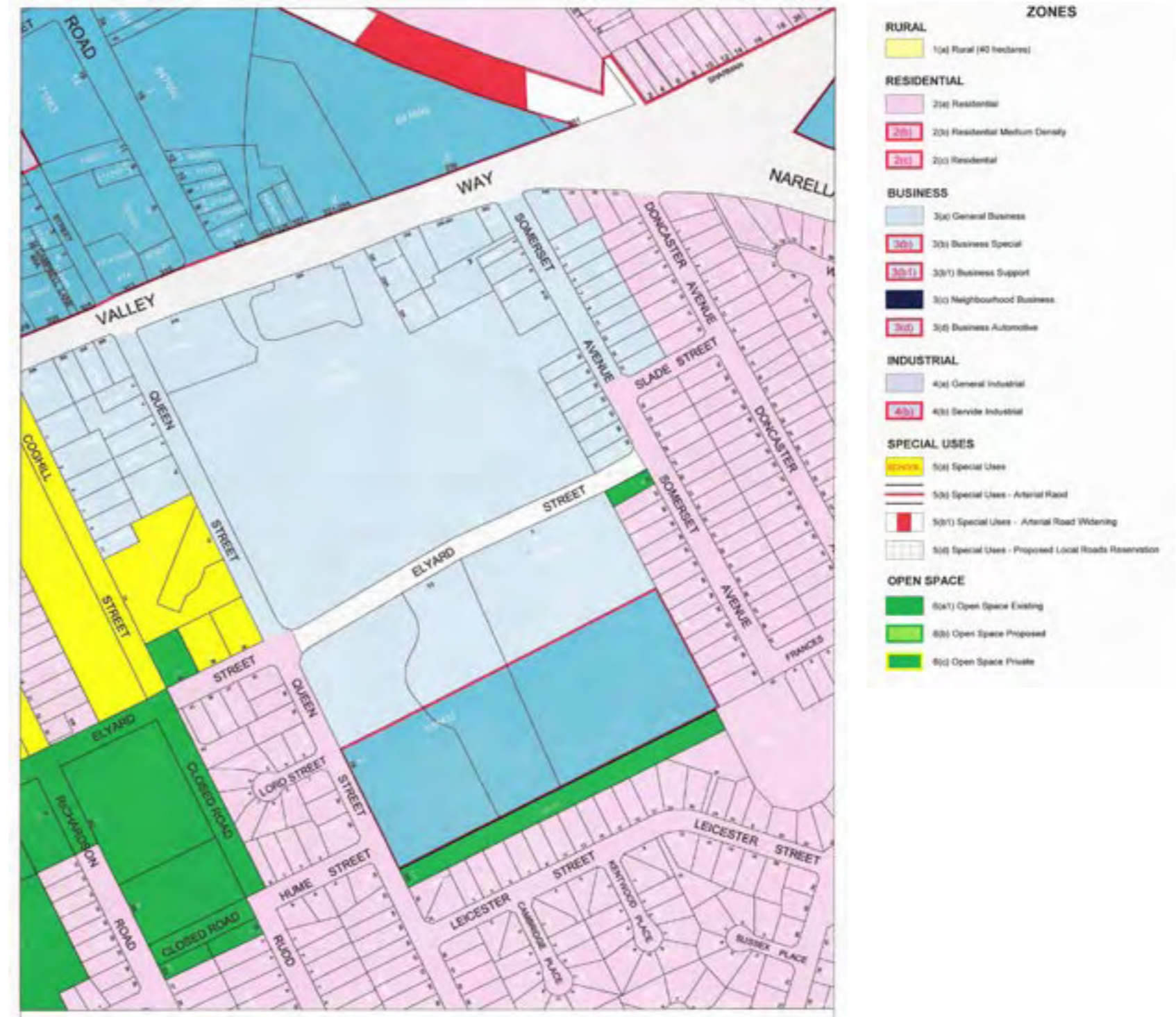
- (a) to provide sufficient opportunities for the development of retail and commercial activities designed to satisfy the needs of the community in an environmentally sensitive manner;
- (b) to encourage the development and expansion of business activities which will contribute to the economic growth of, and the creation of employment opportunities within, the Municipality of Camden; and

The relevant objectives of the 3 (b1) zone are -

- (d) to provide for appropriate forms of commercial development and light industry which will contribute to the economic and social growth of the area and increase employment opportunities in the area; and
- (e) to provide opportunities for residential development which is either ancillary to a permitted use in this zone or in accordance with a comprehensive masterplanned residential estate integrated with surrounding land uses; and

Comment

The proposal achieves these objectives



zoning map



Relevant Specific Clauses of the LEP

There are a number of clauses in CLEP 46 which are applicable to any future development of the land including:

Clause 20A - Height

Generally a two storey height restriction. Council has resolved to prepare a Local Environmental plan to restrict 4 storey development to this site.

Clause 26 - Mine Subsidence

Approval of the mine subsidence board is required.

Relevant State Environmental Planning Policies

A number of State Environmental Planning Policies apply to the land and are addressed below.

SEPP 65 – Design Quality of Residential Flat Buildings

The Environmental Planning and Assessment Amendment (SEPP 65) Regulation 2002 and State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development were gazetted on 26 July 2002. The Regulation and SEPP were introduced to improve the design quality of residential flat developments within NSW.

Objectives

The policy applies to residential flat building developments of three or more storeys comprising four or more self-contained dwellings. The Policy is a matter for consideration in assessment of development applications for residential flat buildings, which fit those criteria under Section 79C(1)(a)(i) of the Environmental Planning and Assessment Act 1979, as amended.

The Policy aims to improve the design quality of residential flat developments in New South Wales as:

- To contribute to the sustainable development of New South Wales;
- To achieve a better built form and aesthetic appearance of buildings, of the streetscape and public places they define;
- To better satisfy the needs of all members of the community including those with disabilities;
- To maximise amenity, safety and security of the occupants and the community;
- To conserve the environment and reduce greenhouse gas emissions.



Design Quality Principles

The Policy identifies ten principles, which provide a basis for evaluation of the merit of proposed designs of residential flat buildings and for preparation of subsequent planning policies and design guidelines and are as follows:

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the natural and built features of an area.

Responding to context involves identifying the desirable elements of a location's current or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings should contribute to the quality and identity of an area.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the street and the surrounding building.

Establishing an appropriate scale requires a considered response to the scale of the existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

Principle 3: Built Form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscape and park, including their views and vistas, and provides internal amenity and outlook.

Principle 4: Density

Good design has a density appropriate for a site and its context; in terms of floor space yields (or number of units or residents).

Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.

Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

Principle 6: Landscape

Good design recognises that together landscape and building operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-coordinating water and soil management, solar access, microclimate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long-term management.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development.

Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Principle 8: Safety and Security

Good design optimises safety and security, both internal to the development and for the public domain.

This is achieved by maximizing overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximizing activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

Principle 9: Social Dimensions

Good design responds to the physical context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflects the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or in precincts undergoing transition, contribute to the desired future character of the area.

The requirements of SEPP65 and the Residential Flat Design Code have been addressed during the design of the project, both in the site layout and the individual block planning.



The result is a scheme, which meets or exceeds the standards set by the SEPP. Some of the requirements to note are:

Site Layout

SEPP65 requirement	Comment
Building depth should not exceed 18 metres	Complies
Window separation for habitable rooms in the separation generally 4 storey blocks should be 12 metres	exceeds 16 metres
Deep soil planting zone is to be 25% of the site area - minimum	Achieved
Communal open space is to be 30% of the site area - minimum	Achieved

Note: the two calculations above do not include the road reserves, which would serve to improve these percentages.

Street setback. A consistent street set back, of 2.2 metres to the edge of the balconies and 3.8 to the building, is to be established. This is in line with New Urbanism principles where surveillance and interaction with the street are encouraged by locating the buildings close to the street boundary. Privacy for the dwellings will be maintained through a level difference to the street.

Building Configuration

The requirements of SEPP 65 including apartment layout, balcony sizes, ceiling heights, storage volume, and acoustic privacy have all been incorporated in the design of the blocks.

SEPP65 requirement	Comment
Daylight access stipulates that 70% of apartments shall receive 3 hours sun in mid winter.	Achieved
No more than 10% of units shall be single aspect south facing.	Achieved
Natural ventilation 60% of units shall have cross ventilation.	Achieved

Unit Mix

A variety of dwelling types and sizes are to be provided on the site. These range from two storey, 3 bed townhouses to single bedroom flats. This will allow a choice for both investors and home buyers which will in turn encourage a mixed demographic of residents, from young to old, renter, owner occupied, home office use etc.

SITE AREA	3,447HA
FSR	1.06:1

Flexibility is important for the project to proceed and adapt in a changing market place. The following schedule outlines the provisions of the current scheme:

Unit type	Number	Percentage (%)	Cars
1 bed unit	40	12	40
2 bed unit	194	57	291
3 bed unit / town house	105	31	210
Visitors			85
TOTAL	339	100	
	Area (m²)		
Retail	1345		45
Commercial	1245		36

TOTAL 707



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Relevant Provisions of Draft State Environmental Planning Policy No. 66 – Integration of Land Use and Transport (Draft SEPP 66)

The proposed development does not trigger the requirements of Draft SEPP 66, however, the location of the development will support the aims and the planning objectives of the policy.

Shaping Our Cities – The Planning Strategy for the Greater Metropolitan Region of Sydney.

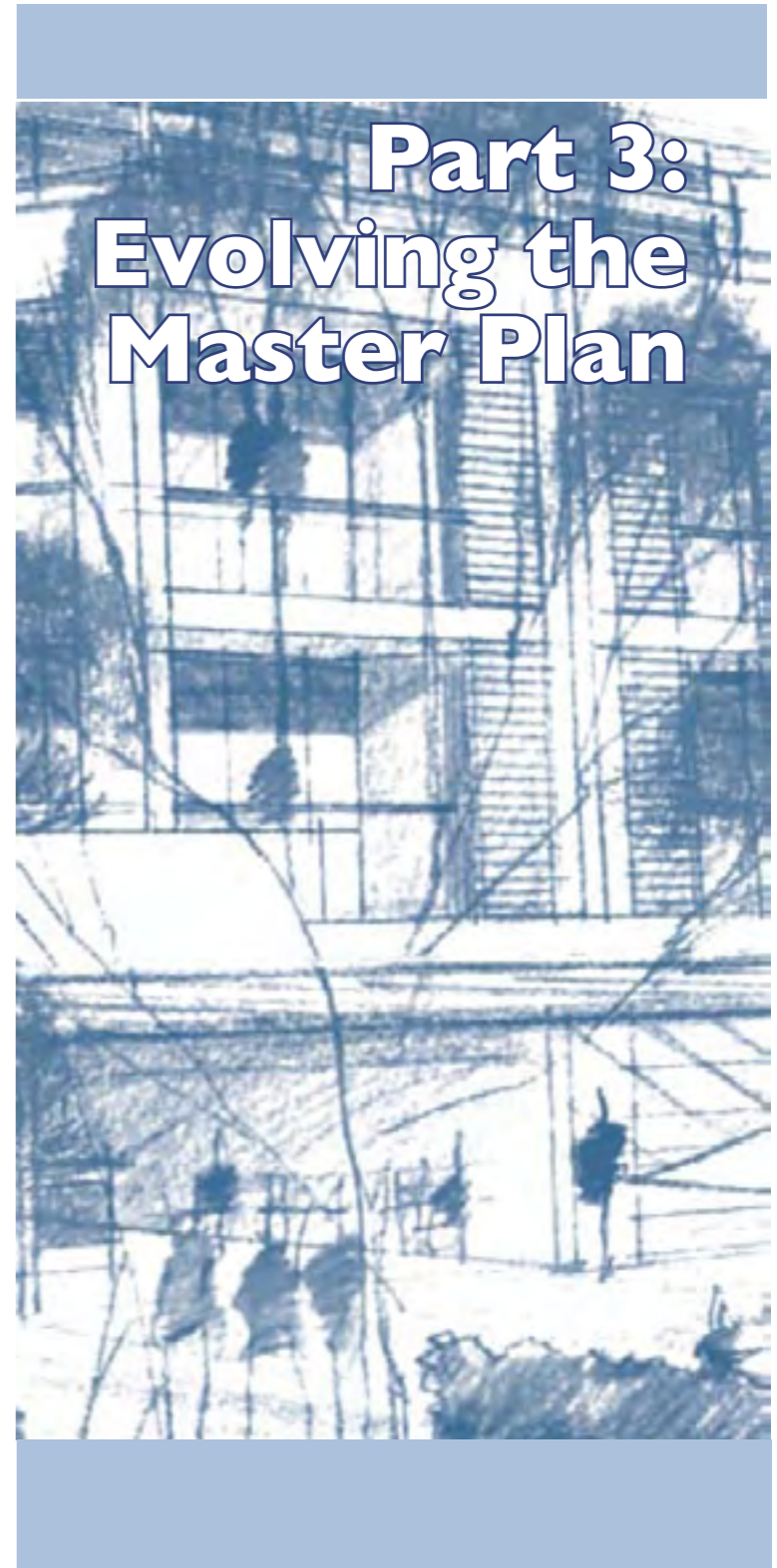
Development of the site for residential purposes is consistent with the aims of *Shaping Our Cities – The Planning Strategy for the Greater Metropolitan Region of Sydney*. Specifically, the Masterplan responds to:

- **Good Land Management** – the site is located in an established town centre and is currently underdeveloped and no longer needed for commercial purposes. In this respect, the site is strategically located in terms of existing infrastructure and facilities.
- **Regional Access** – the site is well located in terms of major transport routes of bus and rail.
- **Social and Economic Benefits** – the proposed development will provide a choice of housing for all the community and given its location within an existing community and make efficient use of existing infrastructure and facilities.
- **A Pleasant Place to Live** – the proposal has been derived from a careful examination of the opportunities and constraints of the site and surrounds. The proposal will ensure that site planning and building form is appropriate in its context. The Masterplan and future development of the land has been through extensive consultation with Council to derive a built form that is appropriate for the site.

The Masterplan has also had regard to the principles and objectives contained in the *Integrated Land Use and Transport Policy*. In this regard:

- The proposal will result in a density that was envisaged by an ongoing consultation process with Council Officers and Councillors. In this respect, better and more efficient use will be made of the existing public transport infrastructure available in close proximity to the site. In addition, residents will use the existing facilities such as shops, childcare, schools and recreation and other services.
- The Masterplan site is located within an established community with transport links to major employment centres, educational establishments (including TAFE and University).
- The Masterplan seeks to enhance integration of pedestrians and bicycle movement within the neighbourhood and linkages with other areas of open space and existing movement corridors.
- The street pattern has been designed for all users.
- The Masterplan is premised on the notion of a “walkable” community, whereby all the necessary services and facilities are readily provided thereby reducing the need of future residents to drive to these facilities.







CONNECTING TO THE PAST

The wider environment and its history forms an important starting point in the creation of a new urban structure. Narellan is rich in history from its early development along the railway line that ran from Campbelltown to Camden. The railway line operated up and until 1963 when it was put out of service due to a number of reasons. Lack of patronage being one of the main issues. Today a railway line would see the development of the Camden LGA at a faster rate than what has always been an area that has achieved high rates of population increases.

Clutha, who operated a coal loader from the site, owned most of the land, as well as land on the southern side of Camden Valley Way. At that time Clutha operated coal mining from Burratorang Valley and transported coal to the site for distribution by rail. The rail ceased operating in the early 1960's. Remnants of some of the buildings are still visible on site.

Clutha's operation extended across Camden Valley Way towards the brick pit, which is the subject of this Masterplan submission. A number of the 'industrial type' buildings remained on site until the early 1990's when the Narellan Shopping Centre commenced construction. Clutha owned a majority of the land from Earle Street through to the brick pit.

A number of other buildings were erected on the lands, and the current Council Administration building in Queen Street was the office of Clutha until the late 1990. Clutha ceased operations in the Camden and Wollondilly Council areas around the late 1990's. Refer to aerial photographs for details of history of Narellan area.





masterplan

key

- 500m from PO
- 800m from PO
- Heritage Building
- medium density
- rezoned medium density
- business/commercial
- existing pedestrian based retail
- pedestrian based retail
- light industrial
- industrial
- existing community facilities
- proposed community facilities
- urban parkland
- regional parkland
- post office
- bus stop



Recent History of the Evolution of this Masterplan

Camden Council adopted a Strategic Plan for the centre of Narellan in August 2002. The plan established a vision for Narellan as a sub-regional centre. An 'Enquiry by Design' workshop process was used to investigate the potential of Narellan and identify opportunities to realise these visions.

The outcome of the workshop was a series of indicative development plans, and formed part of the exhibition of Draft Development Control Plan 126 (DCP 126). This DCP was placed on public exhibition. In February 2004, Council adopted:

- A statement of Desired Future Character for Narellan;
- The indicative development plans as a Master Plan for Narellan; and
- The general Design Principles to provide direction for these areas built form.

As a result of the Narellan Master Plan, the owners of the land sought to develop the land in accordance with the principles outlined in Council's documentation. Council have been conscious of the important role the subject site will play in the invigoration of the Narellan Township. The adopted Narellan Strategic Plan and subsequent Narellan Master Plan identified the site as requiring special attention and used it to accomplish aims in the immediate vicinity.

It was during the development of the latter document that detailed investigations into the potential of the site began. Elements such as promoting Elyard Street as the main street of Narellan, introducing higher populations next to shopping and transport nodes while achieving high amenity in the area have underpinned all proposals from the outset.



During this time SEPP 65 and BASIX have come into force. This has added complexity and cost to the project, but has also increased the sensibility and sustainability of the designs

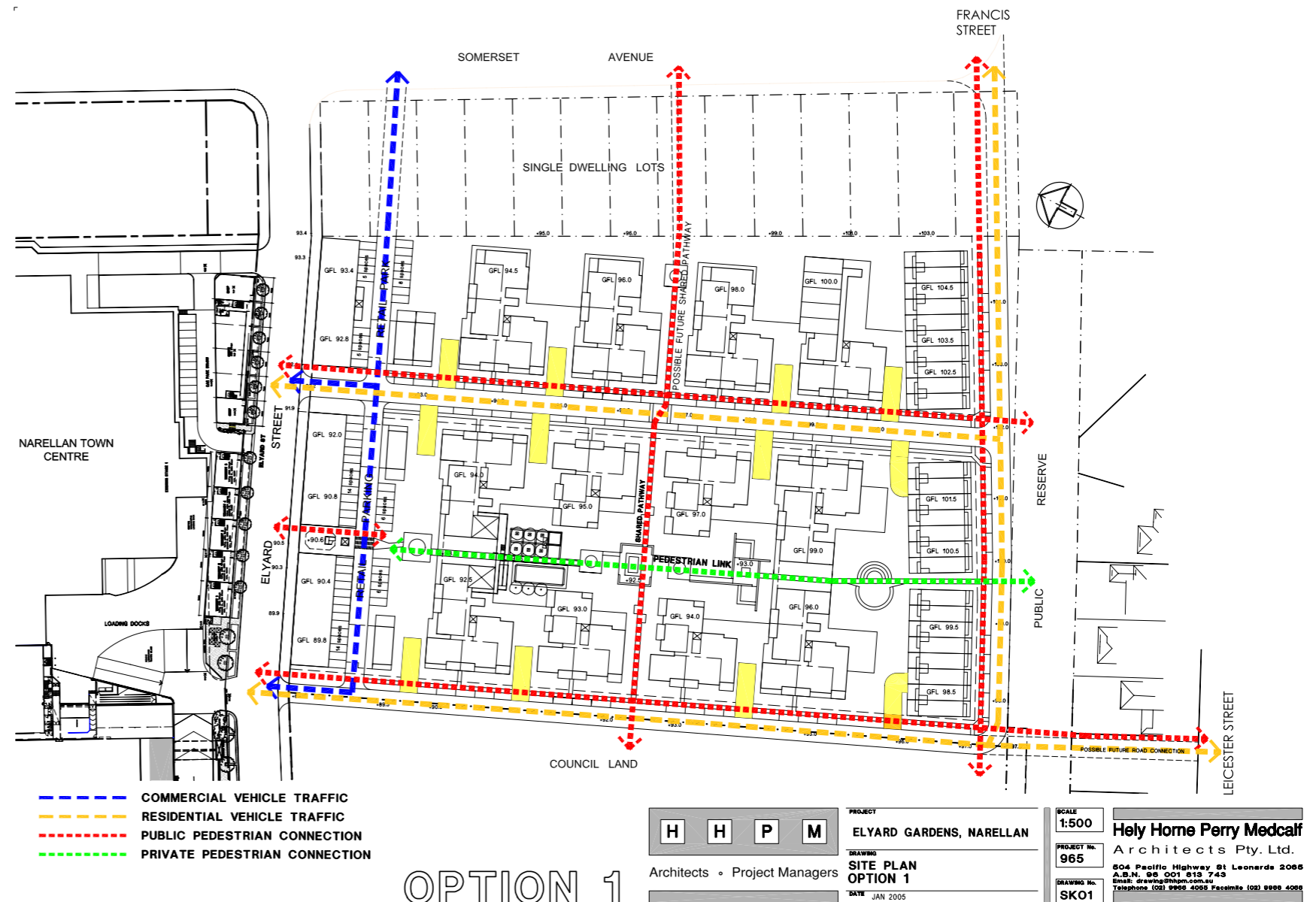
The current assembled project team has had a productive working relationship with Camden Council as evidenced by the numerous meetings that have taken place. This has taken the form of an open exchange of ideas, which was clearly demonstrated in the mutual benefit obtained from the independent urban planner engaged by Council to oversee the development of the project.

The culmination of this process came with the presentation of a preliminary scheme, which forms the basis for the Masterplan, to Councillors. The reception of this scheme, with explanation of the thinking behind it and reasons that directions were taken, was favourable.

This has given the team confidence to pursue this course and produce this site-specific Masterplan for adoption.

Connecting to the Surroundings

For the evolving centre to function properly it needs multiple connections to the context. These are walking/cycling links, road links, and connections to bus routes. Traditional urban centres had a strong and often seamless connectivity with their surroundings, and the Narellan Town Centre will create strong links with external areas.



proposed traffic plans showing connections



CONNECTED OPEN SPACES

The creekline and the open space corridor between Queen Street and Somerset Avenue and their associated vegetation gives the opportunity to create/embellish on these open space areas linking through the evolving centre. These have a variety of characters and the proximity of these to the Town Centre and its density housing will create a high level of amenity and recreational opportunity. Roads proposed within this development will also assist in providing access to these open space networks that are rarely used because they are inaccessible.

Special Places

Integral to the Masterplan are a series of special places, which form the highlights of the public domain. There are reference points in the evolving centre, providing both urban and naturalistic settings for daily life and leisure.

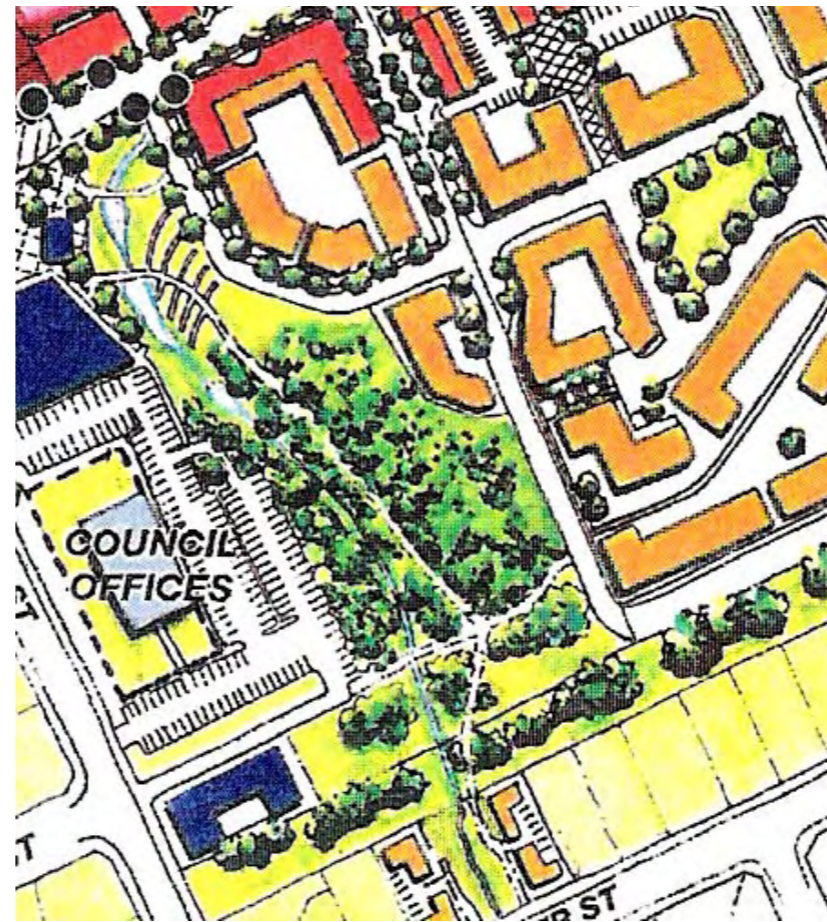
The Hub

Elyard Street is intended to become a key street in the structure of the evolving centre, providing a strong link from the residential areas to the south (e.g. Richardson Road) to the urban core adjacent to the Town Centre Shopping Centre. Elyard Street will provide secondary retail and business opportunities, including the Town Park to the west of the subject site. The street will contain cafes, retail and business uses.

Town Park

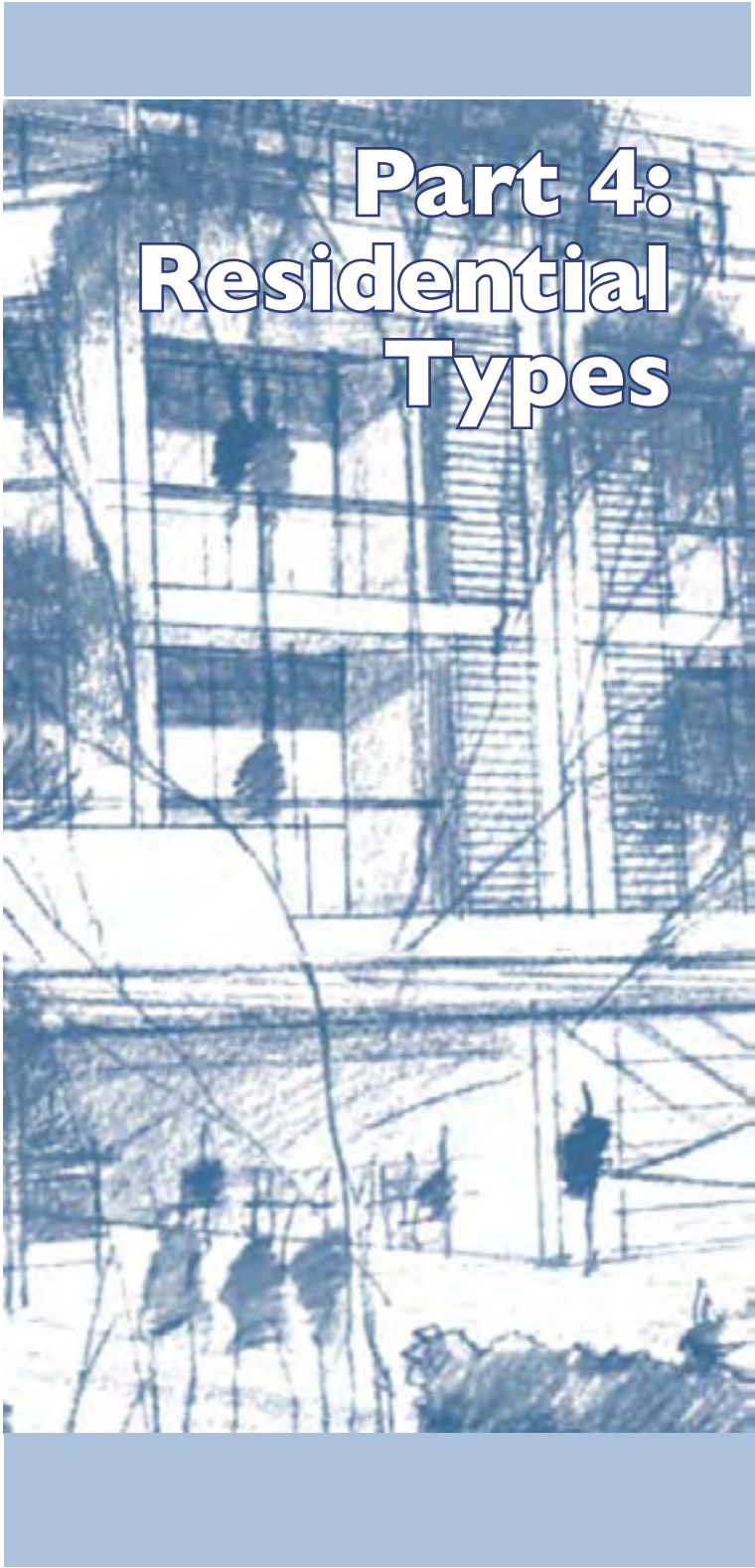
The Town Park is located between the subject site and the library building. The Town Park will provide a visual green space within the Town Centre and will provide an amenity space for the whole of the centre.

To the south of the subject site is an open space corridor that runs from Queen Street to Somerset Avenue. This corridor will provide a visual and physical separation from existing dwellings in Leicester Street and the subject site. This corridor will be further embellished with landscaping to reinforce the importance of this corridor and provide linkage to the Town Park.



Narellan Township Masterplan





**Part 4:
Residential
Types**



The scheme explored by the consortium's team resulted in 339 dwellings or 743 bedrooms. However, flexibility is required in dwelling numbers to suit evolving markets and the staging of the development over a number of years. Retail space = 1345m², whilst commercial space = 1245m². An outline scheme was produced to give the Council, community and developers certainty that a viable and exemplary scheme can be achieved.

Mixed use

Along Elyard Street there are opportunities for mixed-use buildings, which allow retail or business uses at lower levels. This will ensure that there are active places with high levels of passing pedestrian and vehicle trade, and building design will therefore reflect a commercial or 'shop-top' typology. The characteristics of this building type are:

- Ground level awnings and verandahs at first floor and other levels;
- Parapet fronted facades as opposed to eaves;
- Opportunity for rear access and servicing;
- No or minimal setback to street;
- Shopfront or commercial windows/frontages at ground level;
- Commercial floor to floor heights at ground floor level;
- Separate residential and commercial entries/access.

Apartments

Apartments are relatively formal and create a broken street wall form. The characteristics of these apartments are:

- Balconies and verandahs, with secured access, emphasising potential for indoor/outdoor spaces;
- Small setback to street;
- Highly articulated built forms;

- Create a sense of 'buildings in landscape' and communal facilities located central to the development;
- Basement carparking level with internal access to apartment blocks;
- Vertical elements on front and side facades; and
- Generally symmetrical design with central entry.

Two storey attached house

Located at the southern part of the site, the two storey attached houses provide a transition from the four storey apartments to the residential development located in Leicester Street. These are on relatively narrow lots and are generally grouped into small runs for efficient use of lot widths. The characteristics are:

- Front new road along open space corridor;
- Dwellings have relationship to dwellings in Leicester Street;
- Small front setback to new road;
- Roof form does not impact on shared view from Leicester Street to Scenic Hills above Harrington Park; and
- Visitor car parking within street system.

Building height

One of the objectives of the Masterplan is to control building height to that which is consistent with the height proposed by Council's Draft Local Environmental Plan.

The bulk of the development will be four storeys, with basement parking, which is the apartment blocks. The main consideration of the erection of any building on the site is the potential for loss of views from properties in Leicester Street. The cross-sections show that the development will not result in loss of shared views to the Scenic Hills. It should be noted that currently the main view is towards the Town Centre Shopping Centre with its blank wall and servicing areas.





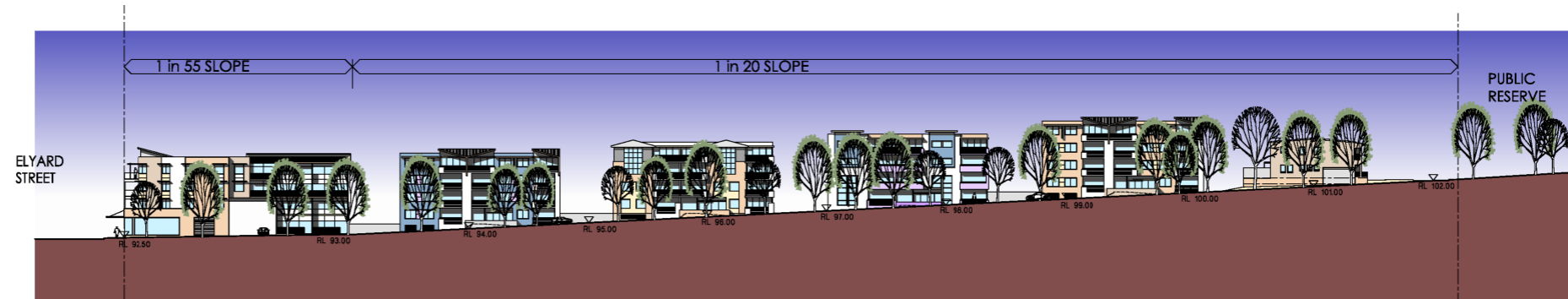
SITE PLAN

ELYARD GARDENS

HHPM
Architects - Project Managers



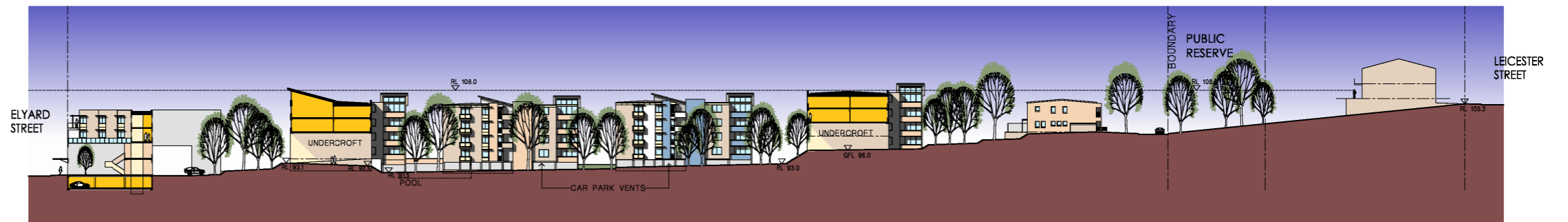
ELYARD GARDENS
masterplan



CENTRAL ROAD SECTION



BOUNDARY ROAD SECTION



01 N-S SECTION THROUGH CENTRAL AREA

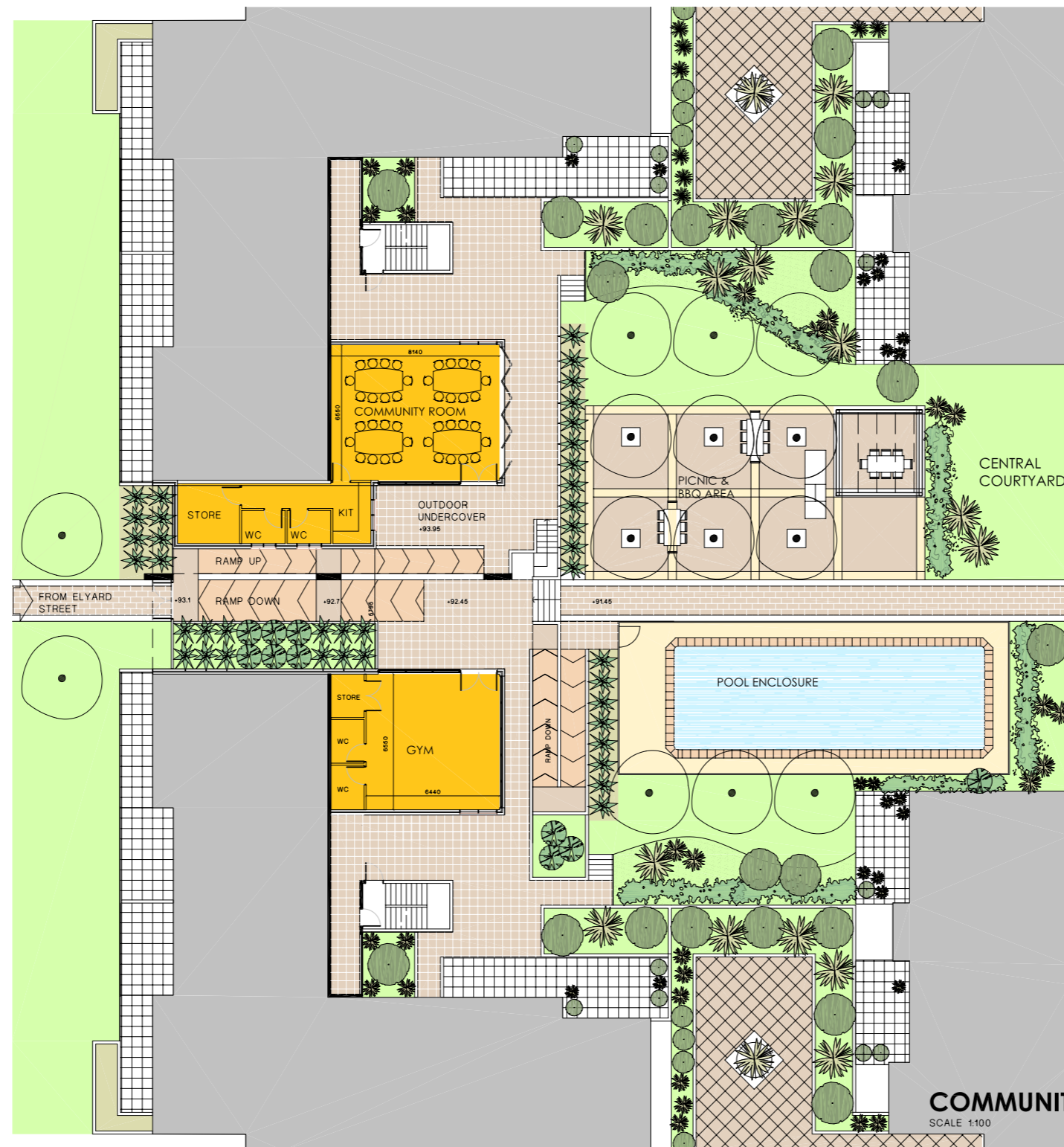
SITE SECTIONS

ELYARD GARDENS

H H P M
Architects • Project Managers



ELYARD GARDENS
masterplan



ELYARD GARDENS
H H P M
Architects • Project Managers



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masterplan



ELYARD GARDENS

masterplan



INTERNAL STREET

ELYARD
GARDENS

H H P M
Architects + Project Managers



ELYARD GARDENS

masterplan



PRIVATE COURTYARD

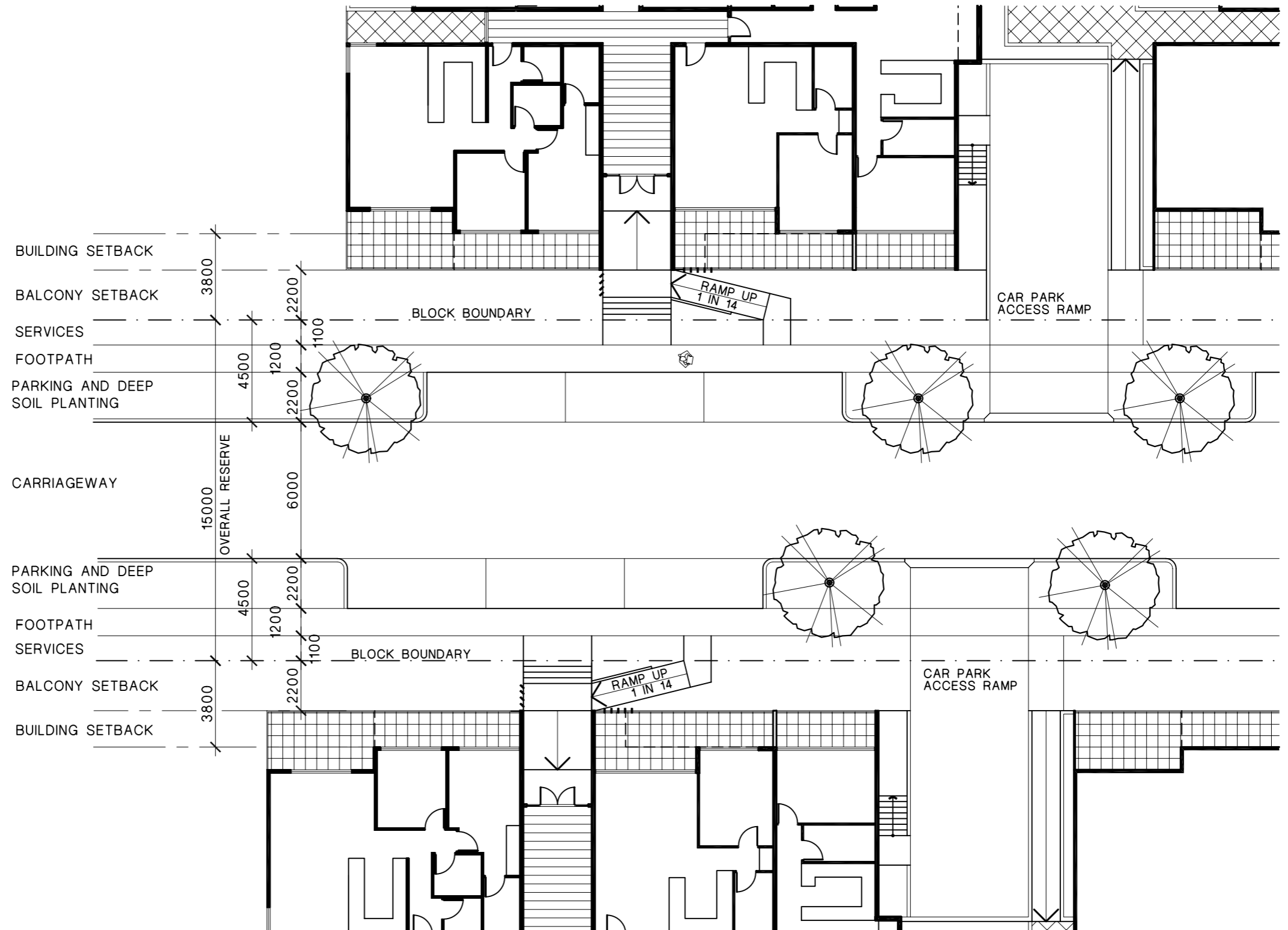
ELYARD GARDENS

H H P M
Architects • Project Managers



ELYARD GARDENS

masterplan



COLOURS

The colour palette shows a range of base colours to be used for the larger areas of the building. The highlight colours can then be used to break up the scale of a building and provide additional complexity to the streetscape. Two or more highlight colours can be used in contrasting or complementary combinations.

BASE COLOURS



HIGHLIGHT COLOURS

(Note: White can be used as a highlight colour on a darker base)



MATERIALS AND COLOUR PALETTE

The finishes of a building are a major contributor to both its appearance and the aesthetics of the surrounding area. The materials and colours are to be utilised to highlight architectural features and to add variety and interest to the streetscape. Buildings should seek to sit harmoniously into their surroundings and avoid a dominating or monolithic appearance.

This palette has been put together as a starting point for the creation of a finishes schedule for the exterior of the building. While no means exhaustive the colours and materials should be regarded as an excellent guide while making selections.

Final colour and material selections shall be submitted on a board with an illustration of the proposed façade treatment, for approval.

MATERIALS

Paving	All types considered
Walls	Timber - varnished, stained or painted Brick - face, coloured render or rendered and painted Block - split face or rendered and painted Fibre cement sheet - painted Not permitted: Reflective steel sheet
Fencing, pergolas, sunshades and handrails	As for walls Steel - painted and powder coated Stainless steel - natural Aluminium - natural and powder coated Brush fencing
Doors and Windows	Timber- varnished, stained or painted Aluminium - powder coated only
Roofs	Steel roof sheet - for any roof with a pitch of greater than 5° a colorbond finish must be used Tile - concrete or terracotta



**Part 5:
Implementation
– design
controls and
requirements**



Design Controls

A site analysis should accompany each application for development. This should include a plan showing the following information:

- North point and all boundary dimensions;
- Any easements;
- The sun's path and shadows;
- Prevailing winds;
- Views;
- Noise sources;
- The location of proposed buildings on the site;
- An outline of neighbouring buildings, where developed;
- Proposed open space areas; and
- Existing private open space areas of adjoining sites.

Height

The height of buildings relates to the type of dwelling to be erected. The height of buildings is to be a maximum of four storeys above basement carparking. The height of buildings is to be as shown on the building height cross-sections shown in this Masterplan.

The aim of these controls is to provide a framework to ensure a high level of amenity while encouraging innovative design to take advantage of the unique characteristics of each location on the site. This will assist in creating a homogenous yet visually appealing streetscape and public realm by ensuring the buildings a good relationship with around them.

Visual Privacy

Development should be designed to ensure visual privacy for the habitable rooms and private outdoor living space, taking into account proposed and existing adjoining dwellings.

- Windows should not directly face one another;
- Where windows are directly opposite they shall be a minimum of:
 - ✱ 12m apart for habitable rooms or between habitable rooms and a balcony;
 - ✱ 9m apart between a habitable room or balcony and a non habitable room
 - ✱ 6m apart between non habitable rooms
- Level differences can be used to increase privacy;

Acoustic Privacy

Dwellings should be designed so as noise from external sources is not intrusive in the habitable room and private outdoor living areas. Attached dwellings shall comply with the Australian Standard. Dwellings affected by noise from sources, such as the shopping centre, shall comply with the Environmental Protection Authority Guidelines. Similarly noise generated on the site should be contained as much as possible to minimise disturbance of the adjoining properties.

- Noisy areas within dwellings should be located next to noisy areas of adjacent dwellings. These include living areas, kitchens, garages and swimming pools;
- Dwellings should be designed so as noise from external sources is not intrusive in the habitable room and private outdoor living areas;
- Sound insulation between adjoining dwellings shall comply with the Building Code of Australia;
- Openings between properties should be minimised and offset;
- Barriers to screen noise should be considered;

Site Analysis

Inherent in this plan is a desire to preserve the qualities of each site through site responsive design and development. A site analysis allows for the constraints and opportunities of the site to be identified and for building design to be responsive to these.

Objectives

- To preserve and enhance the individual qualities of each site through lot responsive design and development.
- To promote well designed buildings, which make a positive contribution.
- To ensure development makes the best use of a site's natural features and considers amenity, streetscape and energy efficiency at the start of the design process.

Setbacks

The principle of the setbacks is to reinforce the character of the public domain and the area in general. To achieve this, buildings are generally to be a zero setback to Elyard Street alignment and a minimum of 3.5m from the internal street alignment.

- 3.5m to the face of the building. Verandahs may encroach on this setback by 1.5m.
- 5.5m to the face of garage doors. Garage doors are not permitted forward of the main building façade. Garage doors shall be a minimum of 900mm behind the front façade.
- Side and rear setbacks – where zero lot line is used, a wall shall not exceed 15m in length. Otherwise buildings should be setback 900mm on the ground floor and 1.5m on the first floor.
- In the case of corner allotments a 2m setback should be provided.



Waste Management

Attached Houses

- An enclosure to contain the required garbage and recycling bins is to be provided for each dwelling. Green waste bins are not required;
- This enclosure is to be sited for convenient disposal of rubbish as well as easy access for moving bins to the collection point;

The enclosure is to screen the bins from the street and to be adequately ventilated to prevent odour build up

Apartments

A suitable garbage storage room shall be provided in the basement level to meet the needs of the particular complex. The room shall provide a waste bin/s for domestic garbage and recycling. No chutes will be installed.

Ceiling Heights

Floor to ceiling heights in habitable rooms shall be a minimum of 2700mm. Floor to ceiling heights in non habitable rooms and hallways shall comply with the Building Code of Australia.

Minimum Dwelling Sizes

- If apartments are proposed then the minimum size shall comply with those stipulated in State Environmental Planning Policy 65 – Design Quality of Residential Development, but generally 1 bedroom apartments shall be a minimum of 55m², 2 bedroom 80m² and 3 bedroom 100m²;
- Townhouses should have a minimum floor area of 90m² for a two bedroom unit and 110m² for a three bedroom unit, not including balconies or outdoor areas;

Private Open Space

Private open space forms a usable landscaped area on each residential site for recreational purposes. Controlling the minimum dimensions and location of private open space on a site are an important means of ensuring that the private open space is useable.

Objectives

- To ensure all residents have access to useable and well located private open space;
- To enhance the amenity of the built environment by providing high quality private open space.

Design Controls and Requirements

Landscaping of private open space should contribute to the amenity of the dwelling and the streetscape. Landscaping and garden design should provide for shade in summer, sunlight in winter, privacy and protection from wind.

Attached houses should provide a minimum of 30m² of private open space. One area, accessible directly from a living area shall have a minimum dimension of 4m x 4m.

First floor apartments shall be provided with a minimum outdoor space of 8m². A balcony located directly off the living area shall have a minimum dimension of 2m.

The layout of the communal open space for apartments should provide for a range of uses and facilities associated with apartment living and make a positive contribution to the amenity of the site and the character of the development.

Parking and Access

Explanation

The provision of car parking should reasonably satisfy the needs of future residents. Parking areas, driveways and garages must be carefully designed so they are safe, accessible and do not detract from the streetscape.

Objectives

1. To ensure all developments incorporate adequate parking and that parking areas and garage structures do not detract from the streetscape not visually dominate the street.
2. To ensure vehicular and pedestrian safety is considered in the planning and design process.
3. To minimise the size and number of driveways and driveway crossovers so that on-street parking is not diminished, pedestrian conflicts are minimised and the visual amenity of the streetscape is not compromised.

Design Controls and Requirements

Garages

Garage to principal street frontage should not dominate the streetscape or detract from the appearance of the dwelling and should be integrated into the design of the dwelling. Garages are not to project forward of the main building frontage and should be located at least 900mm behind the façade. The width of any garage when facing the street should not occupy more than 50% of the lot frontage.



Ecologically Sustainable Development

Ecological Sustainable Development (ESD) encompasses design principles that contribute to environmentally responsible development outcomes. Essentially, ESD aims to achieve a balance that integrates the protection of ecological processes and the natural systems, promotes economic development and maintains the cultural, economic, physical and social wellbeing of people and communities.

This includes planning for the efficient use of new residential subdivisions and designing energy and water efficient homes. The following guiding principles should be taken into account when designing and constructing energy efficient buildings. Council's Energy Efficient Development Control Plan shall apply.

Objectives

- To ensure developments are sited to maximise solar access to indoor and outdoor living areas and to minimise heating requirements;
- To minimise the overshadowing of neighbouring dwellings and open spaces through careful house siting;
- To provide thermal mass and insulation where necessary, to residential dwellings to minimise energy consumption;
- To ensure that waste generated by the proposed development is minimised and disposed of in a proper location.

Design Controls and Requirements

Dwellings and private open space should be provided with adequate daylight, natural ventilation and sunlight. Dwellings should be designed to minimise energy used for heating and cooling.

Significant overshadowing of habitable rooms and private open spaces should be avoided, where possible. Hard surfaces such as driveways and paved areas should be minimised to reduce stormwater runoff.

Appropriate building materials and insulation should be used to assist thermal performance.

Buildings shall comply with the requirements of BASIX.

Architectural Character

Without attempting to create uniformity it is intended to create some common elements that tie the newly evolving centre together. It is seen in our classic older suburbs where designs generally followed a simple set of rules. Whilst it is recognised that there is a wide diversity of building types throughout the area and different architectural expressions, there is a need to provide some guidance to the development and design of building facades and built form in order that a sense of unity and cohesion arises from the assemblage of this development.

Objectives

1. To control key elements to allow for a common built language;
2. To use environmental and climatic control as a key determinant of the aesthetic approach; and
3. To allow for a great deal of diversity within general overall themes.

Form

Consistency of form throughout the proposed development (varying to offer some aesthetic diversity) will create a consistent streetscape. A basic form will incorporate bottom (solid base) middle (lighter mid-section and top (solid roof section). This general form will be punctuated with vertical elements articulating functional (such as entry points and internal stairways). The overall style will reflect simplicity and elegance.

Materials

Brickwork for base elements, and be either face brickwork, bagged or rendered. Various lighter weight cladding materials will be applied to middle sections.

Colours

A limited range of colours will ensure some continuity between various structures. Colours will be generally light and subtly varied.

Typical Floor Plans

This Masterplan provides details of the typical floor plans.



Staging

The development will be carried out according to a timely and economically viable program with the utmost importance being placed on the tidy maintenance of the entire site during the different stages. This is important for both new residents of the site as well as to maintain the amenity for existing residents surrounding the site. Future stages, unaffected by construction, will be levelled and landscaped/grassed. They will be mown and generally maintained until work commences.

The final staging will be determined once more careful and thorough investigation has taken place. However, initial thoughts are that the blocks on the North Eastern boundary will be built first starting with the one closest to Elyard Street and then moving back. This will allow the removal of the tip to occur simultaneously with the construction of these first blocks. The intention is for this to be completed and the hole filled and landscaped prior to the marketing, selling and occupation of the first blocks.

Once these four blocks are complete the central block including the community facilities will be constructed.

Market forces will play a large part in determining the timing for the buildings along Elyard Street. Once it is seen that these are commercially viable construction will proceed. It is likely that some residential blocks will have to be completed and residents moved in for this to come about.

Community Facility Management

Community facilities including a swimming pool, Barbeque and dining equipment, a gymnasium and community room are to be provided for use by residents of the entire site. This is seen as a benefit for both initial marketing and future community building. Operational procedures incorporated in occupancy controls, such as opening times, will be primarily responsible for aspects such as noise control and safety. These facilities will be provided at an early stage to avoid confusion and doubt as to the timing of their construction.





**Part 6:
Reports &
Background
Studies**



Traffic and Transport

The proposed development falls under the requirements of this SEPP. In this regard Traffix prepared a Traffic Impact Assessment of the development on the local road system. Salient extracts are provided below.

The concept development assessed for the Master Plan incorporates 339 residential units, together with retail/commercial buildings that incorporate a total floor area of 2,615 square metres. The Master Plan development application falls within Schedule 1 for the purpose of application of State Environmental Planning Policy No. 11 and accordingly requires referral to the Regional Development Committee.

A detailed description of the proposed development is provided in the Master Plan application prepared separately. In this regard, the Masterplan incorporates the following land use components:

- 339 residential units, comprising:
- 40 one bedroom units (15%);
- 194 two bedroom units (55%); and
- 105 three bedroom units (30%);
- Commercial buildings fronting Elyard Street that incorporate a total floor area of 1,260 square metres; and
- Ground Floor retail fronting Elyard Street that incorporate a total floor area of 1,355 square metres.

The parking requirements of the development will need to accord with Council's DCP No.97 "Car Parking" as well as the Residential Development Control Plan 58. The latter requires parking to be provided as follows for the residential uses:

- space per one bedroom unit;
- 1.5 spaces per two bedroom unit;
- 2.0 spaces per three bedroom unit; and
- 1 visitor space per 4 units.

Application of these rates to the development concept results in a need for 541 spaces as follows:

- 40 one bedroom units 40 spaces
- 194 two bedroom units 291 spaces
- 105 three bedroom units 210 spaces

It is proposed to activate the streets within the site by making for the visitor parking on-street within landscaped parking bays adjacent to the road carriageway and this is considered desirable and this approach is understood to be supported by Council officers. In this regard, the 339 dwellings will require 85 visitor spaces and the options assessed below are capable of accommodating these within indented on-street bays and within basement car parks.

The 1,355m² of retail area attracts a parking rate of 1/30m², resulting in a need for 30 parking spaces. These are provided under the Master Plan under both options. The 1,260m² of commercial area attracts a parking rate of 1/35m², resulting in a need for 36 parking spaces. These are provided under the Master Plan under both options, with the vast majority being provided as at grade right angled parking.

In summary a total requirement for 607 spaces are required and are provided under both options.

Conclusions

The following matters are noteworthy:

- The traffic generation arising from the concept development under the Master Plan is moderate and substantially less than forecast in the strategic traffic planning that has been undertaken on behalf of Council. This will result in significant benefits and will reduce the need for the planned road improvements;

- Most notable is the strong pedestrian and vehicular links to Elyard Street, which will serve to activate and support the viability of the Elyard Street commercial area;
- The overall parking provision of 607 spaces is in full compliance with Council's requirements;
- The access and internal design arrangements will need to comply with the requirements of AS 2890.1 and AS2890.2 and this will be the subject of future development application/s.

It is concluded that the proposed development concept under the Master Plan is supportable on traffic planning grounds. The traffic impacts associated with the development are acceptable and well within the established planning framework and the proposed development will operate satisfactorily.



Landscape Design Statement

Elyard Gardens is to be a progressive medium density housing development, adjoining the future proposed main street for Narellan, Elyard Street. The development and its associated landscape will establish a benchmark for this type of development in the area. The proposed landscape design will establish a rich green framework for this new proposal. The currently under developed, degraded and concreted site will be transformed into a liveable, usable and enjoyable place for future residents.

The streetscape is a carefully considered element of the landscape design. Street trees line the proposed roadways in a traditional urban style. Their size and form will complement the scale and detail of the two and four storey buildings, which will be contained within the mature tree canopy. Setbacks to buildings are heavily planted with trees, shrubbery and groundcovers. This format of intensive, repetitive landscape over a short distance develops a strong sense of entry to each building, pathway and access point. The number and size of the trees serves to place the buildings visually into an envelope of green, creating a garden city environment.

The overall landscape design proposed is dominated by an informal parkland style arrangement of various ornamental trees. This is coupled with deep and extensive garden beds. The creation of these layers in the landscape enhances the sense of planting depth. The use of advanced plantings for the upper layer creates an instant visual impact and sense of arrival, scale and perspective. Importantly, they will also provide shade immediately on completion.

Shade is often an under-utilised aspect of planting both aesthetically and functionally. Apart from the obvious benefits of sun protection and reduction of heat loads, shade provides for the creation of varying planting zones, spaces in which to place seating and places to simply play outdoors. Also, the play of shade on building surfaces adds further detail and reduces the apparent scale of the buildings. Shade was therefore a well considered element of the design, its use and layout over the broader landscape for benefits to future residents in both summer and winter. Plant selection is therefore seasonal, with deciduous trees providing greater sun penetration in the cooler months.

Pathway formats throughout the proposed development are wider than normal. Residents will be able to stroll through the parkland setting with an individual sense of space from one another. Again this design format creates a sense of space and depth to the design. Wider pathway formats also enhance safety by design measures because they create a broader line of visibility.

All pathways ultimately lead to the central community area. This is an internal and private space for residents only to enjoy. Deep landscaped beds and the informal layout of the trees within, open out to lawn areas. Garden seating along pathways and to the edges of garden provide quite spaces to rest. The central community area is viewed by many residents, therefore visual aesthetics and a strong sense of space will be important in the creation of a liveable environment.

Within the central community area are facilities for residents including a swimming pool, fitness and community rooms. All of which are integrated into the total design to create flow, ease of use and suitability to site constraints.

Each individual building also has its own communal areas. These are secondary to the main central space and allows for additional outdoor entertaining. Bar-be-que facilities, seating and shade will be provided to each of these areas. A sense of ownership and belonging can be achieved by designing designated areas for a range of activities.

The landscape design will create visual scale and a sense of space. A space, which is liveable & usable for all residents, whether they are young or old. The landscape design intends to provide for a broad range of social and aesthetic needs. The development with its associated landscape provides a backdrop to the adjoining retail and restaurant outlets of Elyard Street, a backdrop that is an intensive integration of trees, shrubs and groundcovers of the residential development.



Environmental Assessment

Contamination

SEPP 55 – Contaminated Lands requires a consent authority not to grant consent to the carrying out of development on land unless:

- (a) It has considered whether the land is contaminated;
- (b) If the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is proposed to be carried out; and
- (c) If the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

In accordance with this policy, Environmental Earth Sciences undertook an assessment of the land having regard to the previous land use. The report states that:

The total volume of contaminated soil, which will be treated or excavated as part of the works are estimated to be less than 30,000 cubic metres. Although a significant volume of fill material is present on the site the majority of this soil meets the proposed site use criteria as defined in the National Environmental Protection Council (NEPC) (1999) – National environmental protection (assessment of site contamination) measure and therefore this fill material would not be defined as contaminated soil in accordance with the Contaminated Land Management Act 1997.

Due to the intended future residential use of this site it is proposed to excavate the landfill. Essentially the works will initially consist of preparation stages which include the excavation of landfill gas and leachate. Following this the landfill mass will be excavated and screened in several stages. The end product of the screening process will be material which can be beneficially reused on the site for the development and other material which will require off site disposal in

accordance with the NSW EPA (1999) – Environmental Guidelines: assessment, classification and management of liquid and non-liquid wastes.

In order to correctly manage the process of gas and leachate extraction and landfill extraction a remedial action plan (RAP) will be prepared for the works, in addition a remedial works plan (including a waste classification stockpile sampling plan) will be required. The proposed RAP will be completed with reference to the NSW EPA (1997) – Contaminated Sites: guidelines for consultants reporting on contaminated sites.

In summary Environmental & Earth Sciences NSW consider that based upon the extent of works required and the degree of expected impact:

- An environmental impact statement is not required for the proposed works;
- The proposed works do not constitute designated development;
- The proposed remedial works constitute Category 2 remediation; and
- A remedial action plan in conjunction with a remedial works plan will provide sufficient documentation and guidance for completion of the works to an acceptable standard, whilst ensuring the protection of human health and the environment.

Salinity

Soil conditions and site observations across the site showed no apparent signs of actual salinity, which could affect the proposed development. The following points should be planned with water efficiency and conservation in mind:

- The vegetation and landscaping plans for the site should consider salinity, both in terms of the potential impact for salinity on the plants, and in regard to the role of vegetation and landscaping in good salinity management; and
- The use of water wise gardening is recommended for gardens and landscaping.

Water Management

One of the important project objectives is “to provide a model of best practice sustainable urban development incorporating ESD principles” while providing “optimum returns and being cognisant of the wider community needs”. Water management is an integral ingredient of sustainability and with appropriate design can add significant value to a project as well as the passive recreation and visual amenity to be enjoyed by the wider community.

The site has opportunities for enhancement of the ecological, visual and recreational characteristics of the development with appropriate design. Salinity is another potential constraint because it can present conflicting requirements for water management and if not dealt with appropriately, can cause damage to infrastructure in the long term. This matter has been addressed above under “*Environmental Assessment*”.



Stormwater

The basic methodology is to incorporate water sensitive urban design principles in the management of all site water from roofs, gardens, landscape areas and internal driveways. The objective is to provide positive benefit in controlling gross pollutants, litter silt and nutrient discharge from each strata development site.

Each strata development site will have its own detention and storage system installed at building stage. The design incorporates within the building a structure that provides both detention of water and storage of water for landscaping purposes.

The roads are to be dedicated to the public. There will be treatment for the internal road via a gross pollutant trap to capture pollutants and litter. The run off from the dedicated roads will discharge into the downstream Water Quality Structure at Harrington Park.

There is a direct relationship between stormwater on site detention by tanks or purpose engineered structures and water quality. Due to site constraints on site detention and retention is critical to the success in the management of stormwater pollutants from this site. On site detention will retard site discharge to pre-development rates and therefore limits nutrients discharge.

Water Quality

The aim is to show positive benefits as well as recycling valuable roof water for landscaping purposes. Tanks have been designed based on contributing roof areas, average rainfall and estimated irrigation usage and therefore sustainable and specific to each strata development site.

Acoustic Impacts

Potential impacts from environmental noise sources on the acoustic amenity of the proposed residential development in Elyard Street, Narellan have been assessed. It is concluded that the proposed development would be able to comply with the criteria nominated in the report and therefore ensure future residents are not adversely impacted. Upgraded glazing and roof constructions would be required, which would be finalised at the Construction Certificate stage. Where the open window noise criteria cannot be achieved an alternative ventilation system would be required. Noise from traffic movements associated with the development will not cause a noticeable increase to the existing traffic noise levels on the surrounding streets. Therefore no adverse noise impact would be produced. Criteria limiting noise emissions from mechanical services plant are proposed in the report as well as restricting garbage collection times for retail/commercial space.



Conclusion

A number of specialist studies have been undertaken to consider the potential impacts of this development on the subject site. The studies have concluded that the land has the potential for the form of development proposed in this masterplan.

The form of development that will occur will be a mixture of various forms of residential development, from attached housing to apartment style living, and shop-top housing above commercial/retail development.

The densities will be higher than that provided in other parts of the LGA, and indeed Narellan Town Centre. The various forms of accommodation also provide opportunities for the various lifestyles people are requiring in terms of affordability and housing choice.

The approach taken by this masterplan is to meet those changing lifestyles and that mixed-uses such as commercial and retail, form part of the community rather than being separated by way of zoning.

