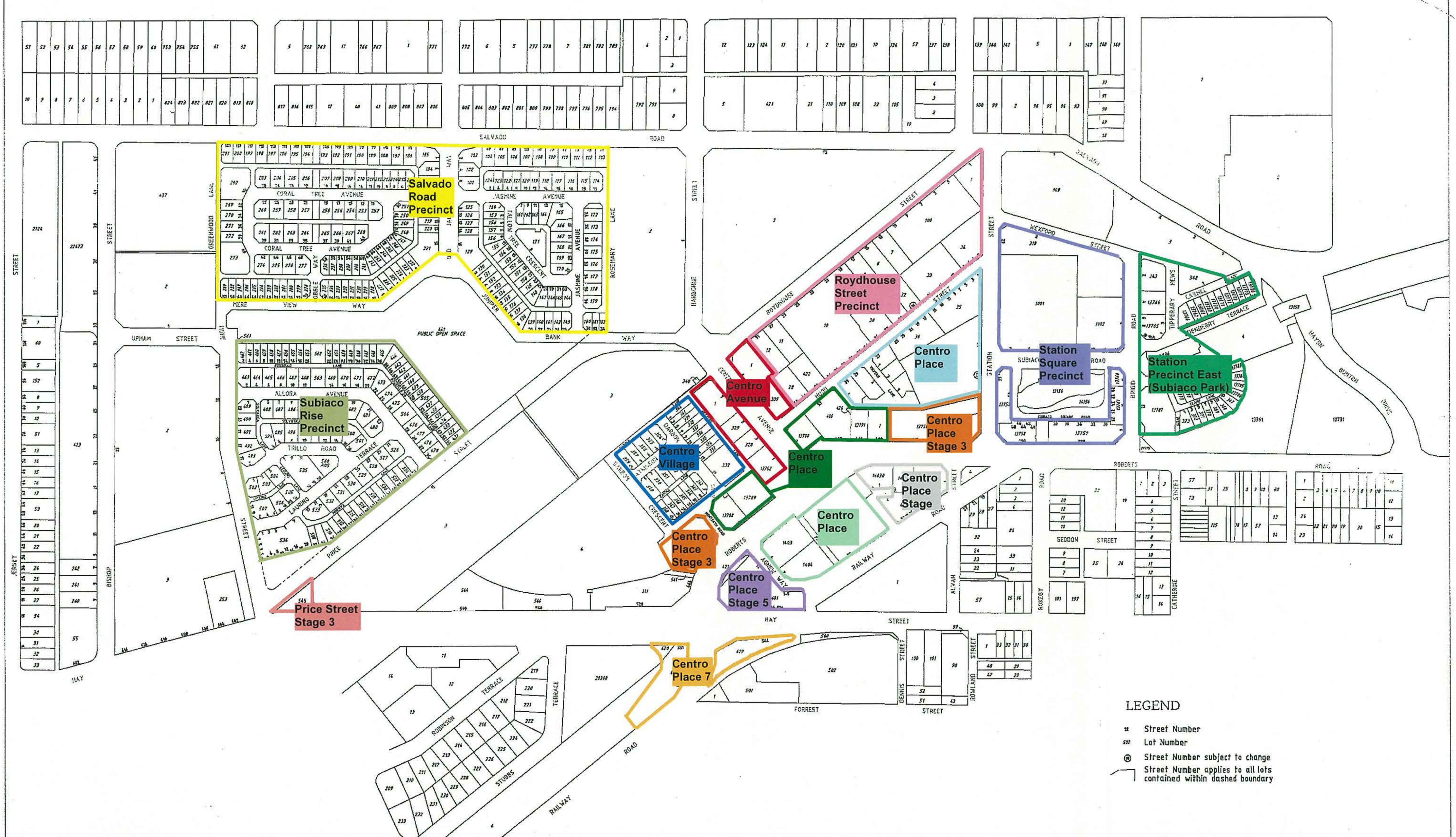
Subiaco Redevelopment Authority

Site Design Guidelines

Contents



Revision	Description	Drawn	Date	Checked
B	ADDED EXTRA STREET NUMBERS	DK	22/08/01	
C	ADDED No's TO LAURINO TCE, ALTERED No's JUNIPER BANK WAY, UPDATE JUNIPER BANK WAY/UPHAM STREET ALIGNMENT	DK	27/08/01	
D	EXTENDED JUNIPER BANK WAY TO INTERSECT WITH HARBORNE STREET	LNL	24/09/01	
E	AMENDED STR.No.'s JERSEY & STATION STREETS.	DK	28/09/01	
F	AMENDED STR.No.'s TRILLO & STATION STREETS.	MPM	10/10/01	
G	REMOVED STR.No.'s FROM LECCINO, MINERVA & SELVATICA LANES.	MPM	01/05/02	
H	UPDATE STREET NUMBERING.	NTR	24/02/03	
I	CHANGED LOT 1404 TO STREET NUMBER 2, 1403 TO 4, AND 1401 TO 22.	NTR	05/03/03	

SUBIACO REDEVELOPMENT AUTHORITY
SCHEME AREA
STREET NUMBERS

SCALE 1:2000 (40 0 160)

ALL DISTANCES ARE IN METRES

All areas and dimensions are subject to survey and Titles Office registration

FILE
Ustation:- 91780-790i

The boundaries depicted on this plan were not re-established as part of this survey therefore this plan does not guarantee their accuracy.

Re-establishment of the cadastral boundaries is recommended for any proposed works on or near existing boundaries

NORTH

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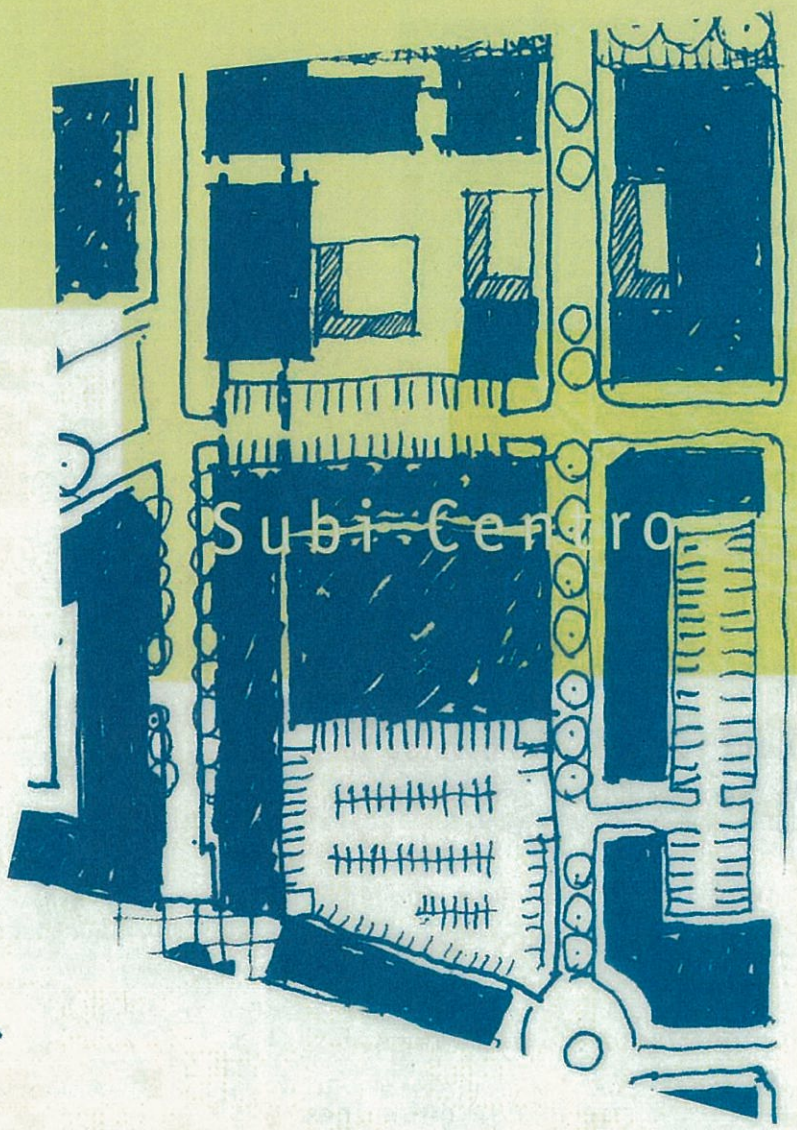
Scale	1:2000
Datum	PCG
Drawn	DK
Date	27/08/01
Job	91780
Drawing	91780-790
Revision	I

Subi Centro

Salvado Road Precinct

site design guidelines

SUBI CENTRO
a place for all



Subi-Centro

site design guidelines

Subi Centro has been developed to offer a stimulating urban environment to its residents within the Subiaco neighbourhood.

This set of guidelines prescribes the standards and recommendations which will ensure that each residence of the Centro development will be a part of the community and that your property offers a valuable investment.

The development control provisions of these guidelines will be given full regard by the Authority in any development application. To depart from these provisions will require full and substantiated justification.

The provisions of this guideline policy prevail to the extent of any inconsistency with the provisions of the Subiaco Redevelopment Planning Policies and the Subiaco Redevelopment Residential Design Manual.

1. HOUSING IN SUBI CENTRO

Overall Guidelines

1.1 Being Neighbourly

Although not especially high, the general residential densities within Subi Centro are greater than standard suburban locations. This density is to take the form of both smaller single residential lots, terrace housing and units. As density increases, being a good neighbour becomes all the more important, particularly with regard to the design of the building and its surrounds.

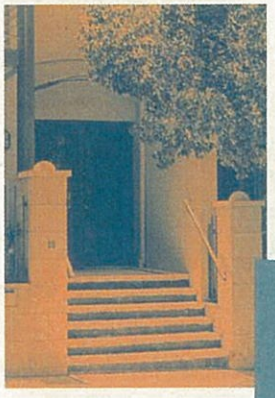
Building character, overshadowing, overlooking and landscaping are a few of the subjects to be covered by these guidelines, that when handled correctly in design and implementation terms, add immeasurably to the livability of the neighbourhood. After all, you are someone else's neighbour so if everyone does the right thing urban harmony should prevail.

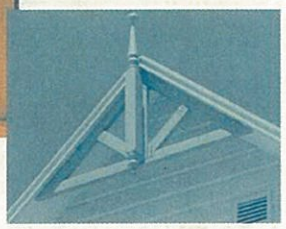
1.2 Form and Character

The pattern scale and types of residential development that are characteristic of other successful streets and precincts in Subiaco ensure the high standard of liveability in those neighbourhoods. Generally it is important that;

+ housing forms reflect the relatively intimate, village like character of Subiaco, with a similar mix of styles and densities;

+ residential buildings should be orientated to the street whilst being designed in awareness of other issues of public/private spaces and interfaces and perceived and real security for users;





+ the built form should be designed as clusters with smaller urban forms to break down the scale and imply incremental growth;

+ housing types are able to be adapted in the future to serve the evolving needs of the community; and

+ residential development is energy efficient and sensitive to the need for water conservation.

1.3 Mixed Use Neighbourhoods

Selected buildings may be refurbished or adapted for housing and mixed use solutions such as corner shops or more intense ground floor commercial in the appropriate precincts. In planning these neighbourhoods and indeed the individual buildings, special attention needs to be given to the issues of minimising the impact of differing activities which may exist within close proximity of one another.

2. AREA COVERED BY GUIDELINES

These guidelines apply to all lots (101 to 289) within the Salvado Road precinct, as shown in Figure 1. From time to time, changes of a minor nature may be made to future stages of the subdivision with amendments to the guidelines being made accordingly.

3. SITE PLANNING

Generally lot sizes range from 185sq.m to 494sq.m. Approximately half the lots range from 300sq.m to 470sq.m (average 320sq.m) with the remainder being terrace/town house lots in the 185sq.m to 227sq.m range. There are also 5 grouped dwelling lots with areas of 896sq.m, 903sq.m, 927sq.m, 1140sq.m and 1147sq.m.

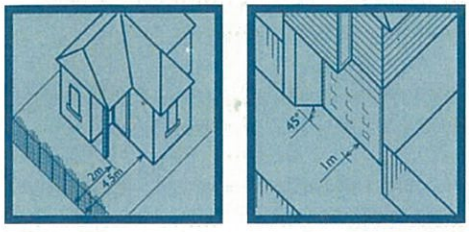
Amalgamation of lots (to form larger development sites) or subdivision of single house lots will not be permitted.

3.1 Setbacks and Heights

Buildings on single house lots are generally required to be set back a minimum of 2m and a maximum of 4.5m from the primary street boundary. Side setbacks and permitted side openings shall be in accordance with the Residential Planning Codes of Western Australia although variations to these requirements may be supported provided the development:

+ complies with the guidelines' solar access requirements; and
+ does not impinge on the privacy of adjoining properties.

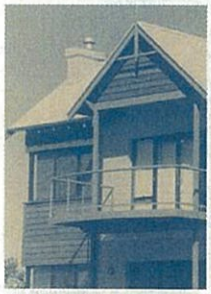
Development on terrace lots may be set back 0m to 2m from the primary street frontage and may be built from side boundary to side boundary. For details of required setbacks see Table 1 - Site Guidelines.



On all lots, garaging and car ports are to be accessed from the rear mews/lane and are required to be set back 1m from the rear boundary (see diagram). Other than this requirement, you may build to the remainder of the rear boundary, excluding any service easements.

Building heights on lots within the precinct vary from 2 storeys or 9m to 3 storeys or 12m depending on location (see Table 1). Building height is defined as finished site level to the highest point of the roof. Variations to this height limit may be supported provided they are of a minor or decorative nature, such as chimneys and finials etc.

On lots where 3 storeys (12m) is permitted, development within 7m of the rear boundary (garaging etc.) is limited to 2 storeys or 9m. Variations to these limits such as those outlined above may be supported. For details of building height limits see Table 1 - Site Guidelines.

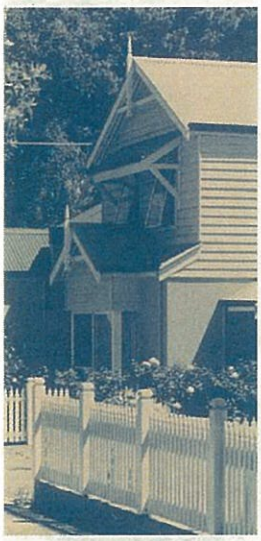


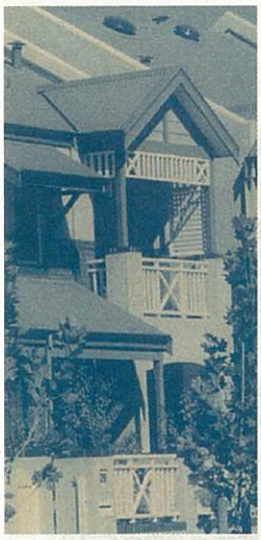
3.2 Solar Access and Energy Efficiency

As the majority of lots in the precinct face either north-south or east-west, the open space and solar access considerations of neighbouring properties will be similar.

The house should be designed so that the most used daytime rooms are orientated to receive the maximum amount of northern winter sun whilst at the same time preserving solar access to adjoining properties. To this effect, no building shall cause more than 50% of an adjoining lot to be in shadow at noon on June 21 or reduce sunlight to the principle area of ground level open space of adjacent residential properties to less than three hours between 9am and 3pm on June 21.

A statement of, or plans showing the overshadowing impact of the proposed development is required to be provided as part of the information lodged at development application stage. (See Section 8 - Approvals)





The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

3.3 Levels

Changing lot levels from those provided by more than 0.5m will not be permitted. No lot levels shall be changed, nor buildings constructed within 2m of any existing retaining walls without prior agreement of the Authority. The dimensions and positions of all other retaining walls proposed should be provided with your development application.

3.4 Vehicles and Garaging

The Redevelopment Scheme requires each house to provide at least one covered car bay on site although it is preferable that two be provided. These car bays must be accessed from the rear lane.

As detailed in Section 3.1, your vehicle access gates, garage or carport must be set back 1m from the rear boundary with a 45° truncation from the structure to the boundary. Rooms above the garage may be cantilevered out to the boundary line. The floor level of the garage or car port must be within 200mm of the finished level of the laneway at the boundary.

4. BUILDING FORM

4.1 Appearance

It is intended that houses within the Salvado Road Precinct will be representative of the 'New Style of Australian Housing' whilst incorporating some of the design elements of housing typical of Subiaco and parts of Wembley. New dwellings should be two storey, have similar volumes, proportions and details such as verandahs and fenestration patterns.

Ideally your house should include such elements as pitched roofs (35-45°), eaves, verandahs , corrugated iron, stonework (limestone), red face brick, higher than standard floor to ceiling heights, verandahs and formal residential entries.

The dwelling should enable "eyes on the street, walkways, mews and public open space" for casual observation from living rooms and balconies.

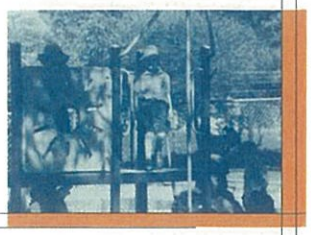
4.2 Plot Ratio

The maximum plot ratio for dwellings in the first stage land release is 1.0:1. Plot Ratio is defined by the Redevelopment Scheme as;

"the ratio of the gross total of the areas of all floors to the land area within the site boundaries and in calculating the gross floor area of all the floors the areas shall be measured including any walls but shall not include lifts, stairs or stair landings, machinery rooms, air conditioning rooms, equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles at or below ground level, lobbies or amenities common to more than one dwelling or occupancy or private open balconies."

Additionally, livable areas within roof spaces will not be included in plot ratio calculations.

For details of maximum site coverage see Table 1 - Site Guidelines.



4.3 Gateway Dwellings

The lots on which 'gateway dwellings' will be situated have been identified in Table 1 - Site Guidelines. As these lots are the most visible when entering the precinct from Salvado Road, the design and appearance of these dwellings will set the tenor for the remainder of the development. It is important then that these corner buildings should address both streets and be encouraged to identify the corner through the use of such elements as a distinct roof form, articulation of corner wall elements, distinctive window design, a common theme of materials and colours of opposite gateway dwellings and special balcony treatments.

Fencing of the side (long) boundary should be constructed of the same materials as the front fence.

4.4 Grouped Dwellings

The grouped dwelling lots have been identified in Table 1 - Site Guidelines.

The development on lots 202 and 273 should: visually 'terminate' the residential road vistas that they are located at the western end of; the pedestrian entrance to the developments and their main architectural features should face the street; and car parking should be located at the rear.

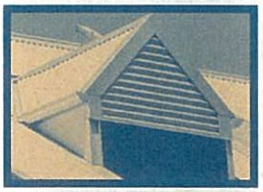
Development on Lots 129 and 221 will in essence provide the gateway to the park from the north. It is therefore important that they be prominent in the streetscape with details in the facades and roofing to reflect this status. As grouped or multiple dwelling sites it is important that the development reflect the rhythm in the street through the use of vertical elements such as parapets.

Development on lot 171 should fully front the street and utilise the site's angles by turning the corners. Parking should be obscured from public view.

4.5 Roofscape

Roofs should generally be pitched between 35-45° where visible from public areas, streets and mews with a shallower pitch acceptable for verandahs and canopies, small areas of skillion and flat roofs behind parapets. All roofs should incorporate overhangs, eaves and where appropriate, verandahs.

As the use of roof space is encouraged, appropriately proportioned dormer windows (as shown) and skylights can add interest to the external appearance of a roof and break up its volume. The use of gables is preferred to hip roofs further adding interest to the streetscape and your house.

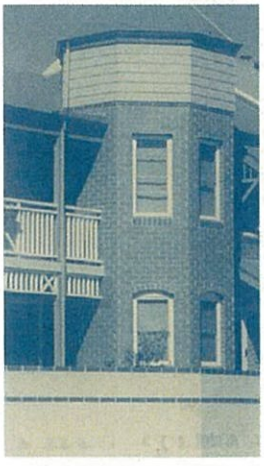


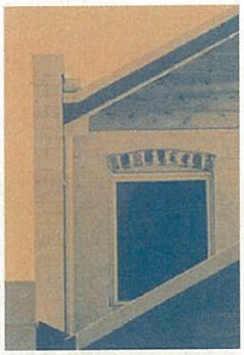
4.6 Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

These areas should be securely enclosed (fences & gates), clearly visible from the living and kitchen areas of the dwelling to enable young children play in a safe environment, one area not many smaller areas, and may be paved, grassed and include trees but may not include large planting beds. The area is not intended to be walled with a roof but a portion may be covered with a pergola or weatherproof canopy providing that the energy efficiency of the home is not impaired. Depending on design, this space could be located on the first floor of a dwelling. The minimum private outdoor areas for single dwelling lots are:

30sq.m for a 2 bedroom dwelling;
40sq.m for a 3 bedroom dwelling;
50sq.m for a 4 bedroom dwelling; and





for terrace house lots the private open space shall be:

20sq.m for a 2 bedroom dwelling;
30sq.m for a 3 bedroom dwelling;
40sq.m for a 4 bedroom dwelling.

All of these areas shall have a minimum dimension of 4m.

Dwellings within a grouped housing development at ground level are to be provided with private open space of no less than 16sq.m. All dwellings above ground level shall be provided with a private balcony of no less than 4sq.m with a minimum dimension of 1.5m, accessed directly off a living space.

4.7 Vehicle access gates, Carports and Garages

These are required to be setback 1m from the rear boundary to enable adequate manoeuvring space into the site. Habitable rooms may be built into the space above garages and may overhang this setback, extending out to the lot boundary.

It is important that garages (particularly doors), carports and parking areas be detailed to reduce their visual impact and add interest at ground level. Generally the materials used in the garage should match those of the house.

Grouped dwelling car parking should be integral to the fabric of the overall development and provide security for the tenants from the car to the dwelling.

Garage and carport details must be approved at the same time as the house even if it is intended not to construct them at the same time. The required storage area may be integrated within the carport. (see Section 7)

5. MATERIALS

5.1 Walls

It is a requirement that exterior walls of houses (facing the street or other public areas) utilise either 'traditional red' brick, rammed limestone, rammed earth, limestone block or rendering and incorporate the use of detailing to break up large areas adding interest and individuality.

The use of limestone, carved or shaped wood, weatherboard, steelwork, painted brickwork and different colours also adds to the interest and texture of the dwelling. See the attached palette for colours and materials that are encouraged within the Precinct.

Bolder, brighter, deeper shades for areas of detail is also encouraged provided that these are in keeping with the overall colour scheme of the house and do not emphasise height, bulk or detract from the general harmony of the streetscape.

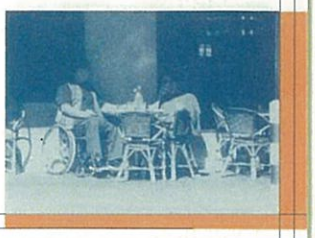
The small lot sizes and use of boundary wall construction makes acoustical privacy particularly important. A high standard of privacy can be achieved by the use of:

+ construction materials and techniques to reduce noise transmission between dwellings; and

+ site and dwelling layout to separate potentially conflicting uses.

5.2 Windows

Windows, particularly those that face the street, should generally have a vertical proportion. This design element adds to the objective of encouraging a vertical emphasis, an important factor when considering the size and width of the lots.



Detailing of the window frame itself and around the windows in the sills is encouraged . Whilst leadlight and patterned glass as a highlight is desirable, the use of dark tinted or reflective glass will not be permitted if able to be viewed from the street or public area.

Single colour awnings over windows should be an integral part of the house/window design. Structures added on at a later stage should be of a scale and material in keeping with the home and the location of the window.

Remember, windows and glass doors facing the street can be whatever size is appropriate while windows on the side of the house will be required to be designed to take into account the issue of overlooking.

5.3 Roofs

Single colour Colorbond roofs (Merino, Saltbush, Beige, Birch Grey & Off White) are preferred as are traditional terracotta coloured tiles and the lighter shades of grey slate. The darker Colorbond colours and dark grey/black slate roofs will not be permitted as they are not consistent with the character of the desired streetscape and absorb more heat in summer than the lighter colours. Zincalume will not be permitted as the reflective qualities can impact upon neighbouring lots.

6. LANDSCAPING

6.1 Front Gardens

Front gardens add a great deal of character to the streetscape. As the lots are comparatively small, the front gardens and courtyards of most lots will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

6.2 Recommended Plant Species

Trees

- Delonix regia (Poinciana)
- Erythrina indica (Coral Bean)
- Morus rubra pend. (Weeping Mulberry)
- Sapium sebiferum (Chinese Tallow Tree)
- Tipuana tipu (Pride of Bolivia)
- Ulmus parvifolia (Chinese Elm)

Shrubs

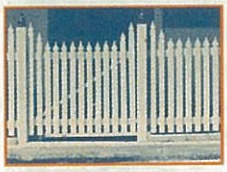
Sun	Semi Shade
Abelia 'x' grandifolia	Azalia sp.
Agapanthus orientalis	Camelia sp.
Buxus sp.	Dicksonia antartica
Gardenia sp.	Fatsia japonica
Hebe sp.	Hydrangea sp.
Plumbago sp.	Viburnum sp.

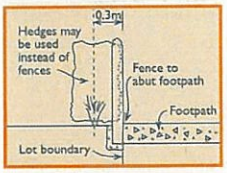
Ground Covers / Climbers

- Bouganvillea
- Hedera sp.
- Hardenbergia sp.
- Lantana sp.
- Wisteria sinensis
- Mandevilla sp.

Hedges

- Buxus heterophylla (English Box)
- Rosmarinus "Blue Lagoon" (Rosemary)
- Royena
- Plumbago auriculata





7. OTHER CONSIDERATIONS

7.1 Site Services

All site services (sewerage, stormwater, water, power, gas and telephone) will generally be via the rear lanes and enter the property at a dedicated access easement approximately 1m x 1m in area for abutting easements and 1m x 2m for single easements. These easements are generally located in a rear corner of the lot to minimise intrusion on your development area and have been identified on Figure 1.

7.2 Fencing

Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. To achieve the same visual effect it is therefore important that your front fence or hedge be no higher than 1.2m and be at least 70% visually permeable. The front fence or hedge must also directly abut the footpath edge so as not to leave a 'weed strip'. (see diagram).

Fencing of the front of your lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are encouraged.
Fencing fronting Salvado Road may be up to 1.8m in height and at least be 50% visually permeable with any solid plinth being no higher than 600mm. Front fencing on corner blocks should include the truncation into the laneway.

Letterboxes should be incorporated into the fence and clearly show your house number.

Side fences must be no higher than the front fence within the front setback of the house and be constructed of the same or matching materials as those used in the front fence. Corrugated fibrous cement fencing is not to be used.

Side (long) boundary fences of the lots identified on Table 1 - Site Guidelines are required to be constructed of the same materials and have the same or similar appearance as the front fence.

The remainder of the fencing on site shall complement the materials used in the house and be no more than 1.8m in height.

Alignment with neighbouring lot fences should be considered when planning fence layouts.

7.3 Rubbish Bins

A separate storage area for large PVC wheeled bins should be catered for at site planning stage. This area should be appropriately screened and located towards the rear of the lot as garbage collection will be via the rear lanes.

7.4 Lighting

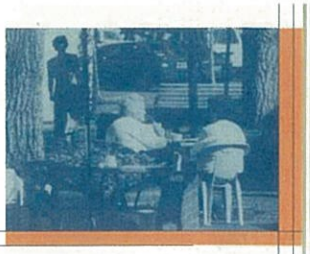
Front yard and house front lighting is encouraged for both security and aesthetic reasons but care should be taken to ensure it does not shine directly into neighbouring properties.

It is the Authority's intention to install laneway lighting once all dwellings are constructed (see Table 1 for affected lots). These lights will be mounted on back walls/fences and buildings on the rear boundary at a height of 3m. Arrangements for wiring and fitting will therefore need to be made at the development application stage. Appropriate electrical safety signage will be required to be installed in the consumer's switchboard advising that the laneway lighting is on a separate circut.

7.5 Air Conditioners

As air conditioners can often be noisy, it is important that they be located in areas that minimise the impact on your neighbours.

Roof mounted air conditioners are often unsightly and should be located at the rear of your roof



where they cannot be viewed from the street and not easily seen from your neighbours property.

7.6 TV Antennas, Satellite Dishes & Radio Masts

TV antennas are to be located within the roofspace wherever reception permits. Where this is not possible, they must be located to the rear of the roof where they are not visible from the street. Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

7.7 Solar Collectors

Solar collectors must not be visible from the street or a public area. Ideally they should be located on the plane of the roof at the rear with the tank being installed within the roof space. If it is absolutely necessary to use a stand to change the angle of the collector then again it must not be visible from the street and not easily viewed from the neighbours property.

7.8 Clotheslines and Drying Areas

These should be located to maximise winter sunshine without being able to be seen from public areas.

7.9 Storage Area

Providing outdoor storage space for bicycles and garden equipment etc. is important and most effectively done at the design stage. It is therefore a requirement that each house provide a secure storage area of at least 4sq.m which is fully integrated into the dwelling or garage. Steel or tin sheds will not be permitted.

8. APPROVALS

8.1 All Development

The Redevelopment Act states that the carrying out of any development within or partly within the Redevelopment Area requires the approval of the Authority.

Development is defined as:

(a) the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land;

(b) a material change in the use of land; and

(c) any other act or activity in relation to land declared by regulation to constitute development,

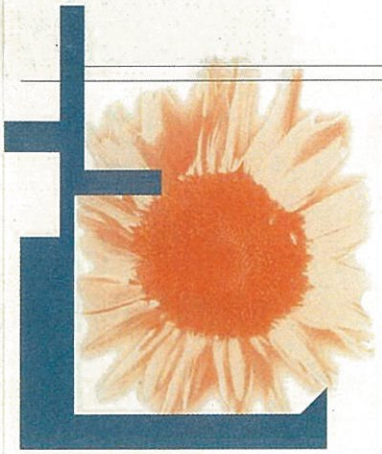
but does not include any work, act or activity declared by regulation not to constitute development (eg. maintenance work on government utilities).

Separate development approval from the City of Subiaco is not required although your application must be referred for comment to the City of Subiaco, the Town of Cambridge and relevant public agencies before determination by the Authority.

The usual local government Building and Health By-Laws remain in force and Licences must still be obtained, whenever necessary, directly from the City of Subiaco.

8.2 The Application

An application for approval to commence development is required to be made by completing Form 1 (available from the SRA and Subiaco Council) and should be accompanied by such plans and other information as the Authority may reasonably require.



Generally the Authority will require the following information to be provided with an application for approval to commence development:

+ a location plan to a scale of at least 1:2000 identifying the land which is the subject of the application for approval to commence development;

+ six (6) copies of a plan(s) to a scale of at least 1:500 showing:

(i) the location and proposed use of any existing buildings and out buildings to be retained and the location and use of buildings proposed to be erected or demolished on the land;

(ii) the existing and the proposed means of access for pedestrians and vehicles to and from the land;

(iii) the location, number, dimension and layout of all car parking spaces intended to be provided;

(iv) the location and dimension of any area proposed to be provided for the loading and unloading of vehicles carrying goods or commodities to and from the land and the means of access to and from those areas;

(v) the location, dimensions, design and particulars of the manner in which it is proposed to develop any landscaped area, including the retention of existing trees and other vegetation, fences and walls;

+ plans, elevations and sections of any building proposed to be erected or altered and of any building it is intended to retain, including details of materials of construction, finishes and external colours;

+ a statement of, or plans indicating the impact of the proposed development on the streetscape, views, privacy and overshadowing;

+ a statement setting out details of the intended use and the way in which that use is proposed to operate;

+ details of all signs and advertising structures; and

+ any other plan or information required to be provided pursuant to the Redevelopment Scheme or which the Authority may require to enable the application to be determined.

A fee is required to be paid for any development application relating to land within the Scheme Area. The fee is scaled according to the value of the proposed development.

The Authority aims to determine all applications within 60 days of lodgement of which 42 days is allocated for consultation with the City of Subiaco and the Town of Cambridge.

Table 1: Site Guidelines

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m) min - max	Side (m)	Rear (m)	Height (m)	Max. Site Coverage (%)	Side Fence Treatment	Gateway Treatment	Other Considerations
101	342	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%	✓	✓	See 4.3 & 7.2
102	342	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
103	465	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%	✓	✓	See 4.3 & 7.2
104	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
105	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
106	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
107	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
108	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
109	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
110	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
111	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
112	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
113	331	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
114	318	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
115	330	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
116	330	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
117	330	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
118	330	1	2 - 4.5	As per R.Codes	See 3.4	9m or 2 storeys	70%			
119	230	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
120	230	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
121	230	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
122	230	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
123	230	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
124	245	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
125	227	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%		✓	See 4.3 & 7.2
126	211	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
127	212	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
128	211	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
129	902	5	0 - 2	Nil	See 3.4	12m or 3 storeys	80%		✓	See 4.4
130	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
131	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
132	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
133	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
134	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
135	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
136	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
137	214	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
138	257	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
139	257	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
140	229	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
141	229	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
142	229	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
143	250	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%	✓	✓	See 4.3 & 7.2
144	225	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%	✓		See 7.2
145	200	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
146	200	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
147	254	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%	✓	✓	See 4.3, 7.2 & 7.4 (Laneway lighting)
148	256	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
149	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
150	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
151	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%		✓	See 4.3
152	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
153	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
154	226	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
155	266	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
156	227	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
157	200	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
158	200	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
159	200	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
160	225	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%	✓		See 7.2
161	207	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%	✓		See 7.2
162	207	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
163	207	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
164	311	1	2 - 4.5	Nil	See 3.4	9m or 2 storeys	70%			
165	515	1	2 - 4.5	Nil	See 3.4	9m or 2 storeys	70%	✓		See 7.2 & 7.4 (Laneway lighting)
166	318	1	2 - 4.5	Nil	See 3.4	9m or 2 storeys	70%			
167	302	1	2 - 4.5	Nil	See 3.4	9m or 2 storeys	70%			
168	303	1	2 - 4.5	Nil	See 3.4	9m or 2 storeys	70%			

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
169	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
170	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
171	895	5	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			
172	313	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓		See 7.2
173	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
174	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
175	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
176	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
177	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
178	303	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			Laneway lighting - See 7.4
179	304	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
180	213	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%	✓	✓	See 4.3 & 7.2
181	185	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			
182	185	1	0 - 2	Nil	See 3.4	12m or 3 storeys	80%			Laneway lighting - See 7.4
183	358	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓	✓	See 4.3 & 7.2
184	353	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
185	470	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓	✓	See 4.3 & 7.2
186	329	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
187	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
188	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
189	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
190	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
191	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			

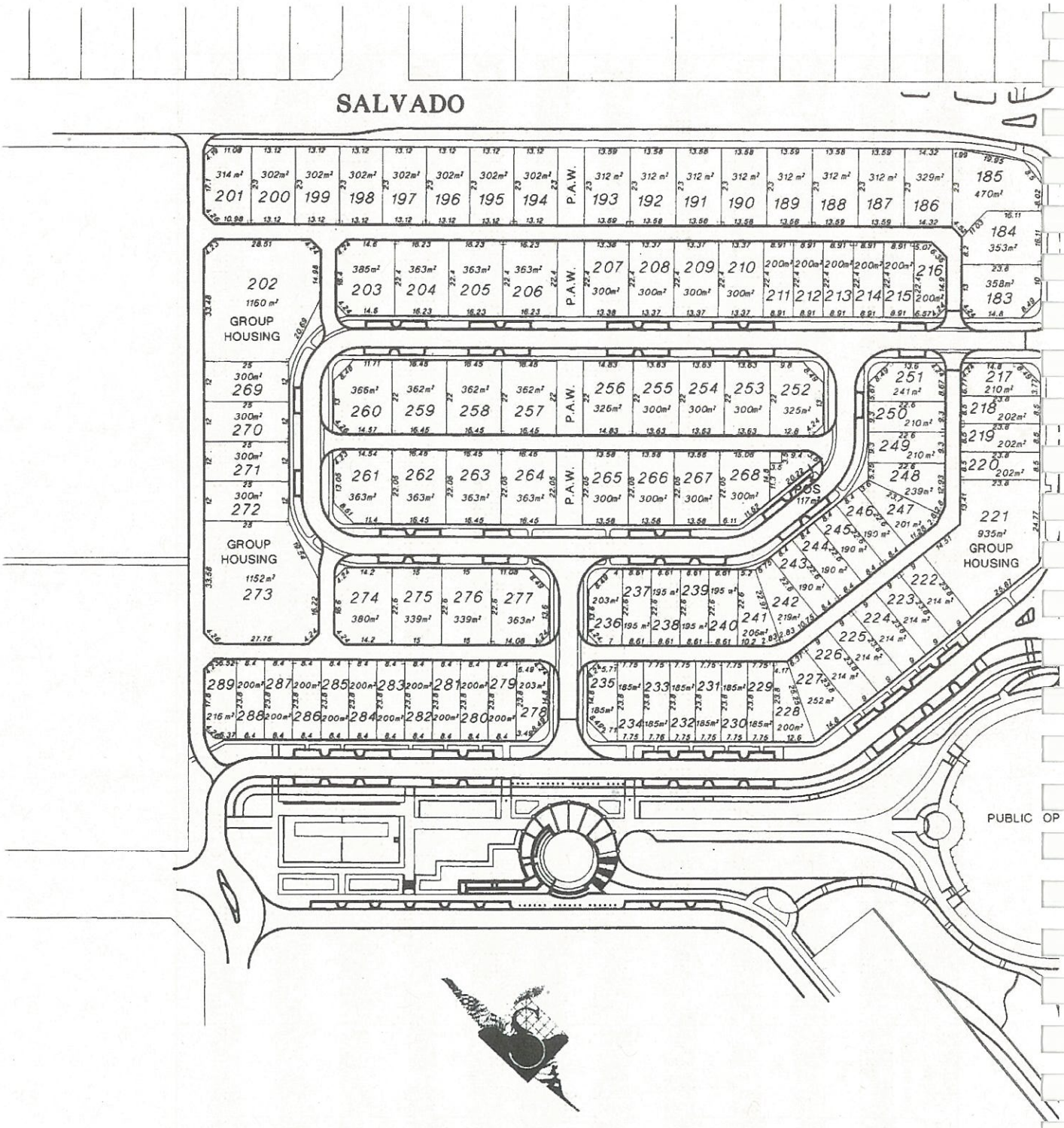
			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
192	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
193	312	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓		See 7.2
194	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓		See 7.2
195	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
196	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
197	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			Laneway lighting - See 7.4
198	302	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
199	302	1	2.5 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			See SRA re:front fence Laneway lighting - See 7.4
200	302	1	2.5 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			See SRA re:front fence
201	314	1	2.5 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			See SRA re:front fence Laneway lighting - See 7.4
202	1160	5	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			See 4.4 & 7.4 (Laneway lighting)
203	385	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			
204	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	80%			
205	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
206	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓		See 7.2
207	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%	✓		See 7.2
208	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
209	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
210	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 storeys	70%			
211	200	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
212	200	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			
213	200	1	0 - 2	Nil	See 3.4	9m or 2 storeys	80%			

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
214	200	1	0 - 2	Nil	See 3.4	9m or 2 Storeys	80%			
215	200	1	0 - 2	Nil	See 3.4	9m or 2 Storeys	80%			
216	200	1	0 - 2	Nil	See 3.4	9m or 2 Storeys	80%			
217	210	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%	✓	✓	See 4.3 & 7.2
218	202	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
219	202	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
220	202	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
221	935	5	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%		✓	See 4.3
222	214	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
223	214	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
224	214	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
225	214	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
226	214	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
227	252	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
228	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
229	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
230	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
231	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
232	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
233	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
234	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
235	185	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%	✓	✓	See 4.3 & 7.2

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
236	203	1	0 - 2	Nil	See 3.4	12m or 3Storeys	80%	✓	✓	See 4.3 & 7.2
237	195	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
238	195	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
239	195	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
240	195	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
241	206	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
242	219	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
243	190	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
244	190	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
245	190	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
246	190	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
247	201	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
248	239	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
249	210	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
250	210	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
251	241	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%	✓		See 7.2
252	325	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
253	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
254	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			Laneway lighting - See 7.4
255	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
256	326	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
257	362	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
258	362	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
259	3562	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			Laneway lighting - See 7.4
260	366	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
261	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
262	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
263	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
264	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
265	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
266	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
267	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
268	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓		See 7.2
269	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
270	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			Laneway lighting - See 7.4
271	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			Laneway lighting - See 7.4
272	300	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
273	1152	5	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			See 4.4 & 7.4 (Laneway lighting)
274	380	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
275	339	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
276	339	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%			
277	363	1	2 - 4.5	As per R Codes	See 3.4	9m or 2 Storeys	70%	✓	✓	See 4.3 & 7.2
278	203	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%	✓	✓	See 4.3 & 7.2
279	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			

			SETBACKS							
Lot No.	Lot Size (m2)	No. Dwellings per lot	Front (m)	Side (m)	Rear (m)	Height (m)	% Site Coverage	Side Fence Treatment	Gateway Treatment	Other Considerations
280	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
281	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
282	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
283	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
284	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
285	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
286	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
287	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			
288	200	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			Laneway lighting - See 7.4
289	216	1	0 - 2	Nil	See 3.4	12m or 3 Storeys	80%			



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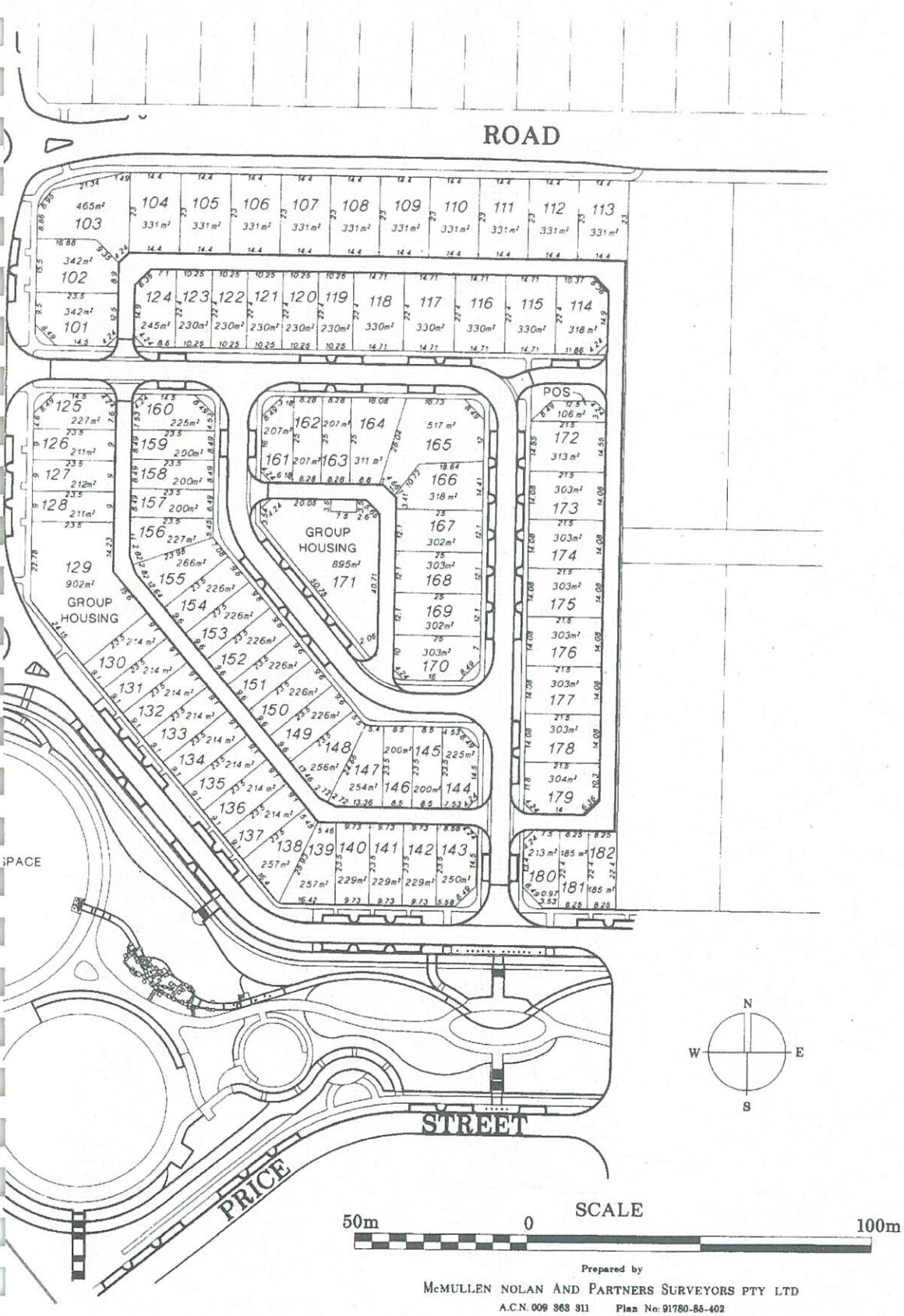


Prepared by

McMULLEN NOLAN AND PARTNERS SURVEYORS PTY LTD

A.C.N. 009 868 811 Plan No: 91780-88-402

SUBIACO
REDEVELOPMENT
AUTHORITY

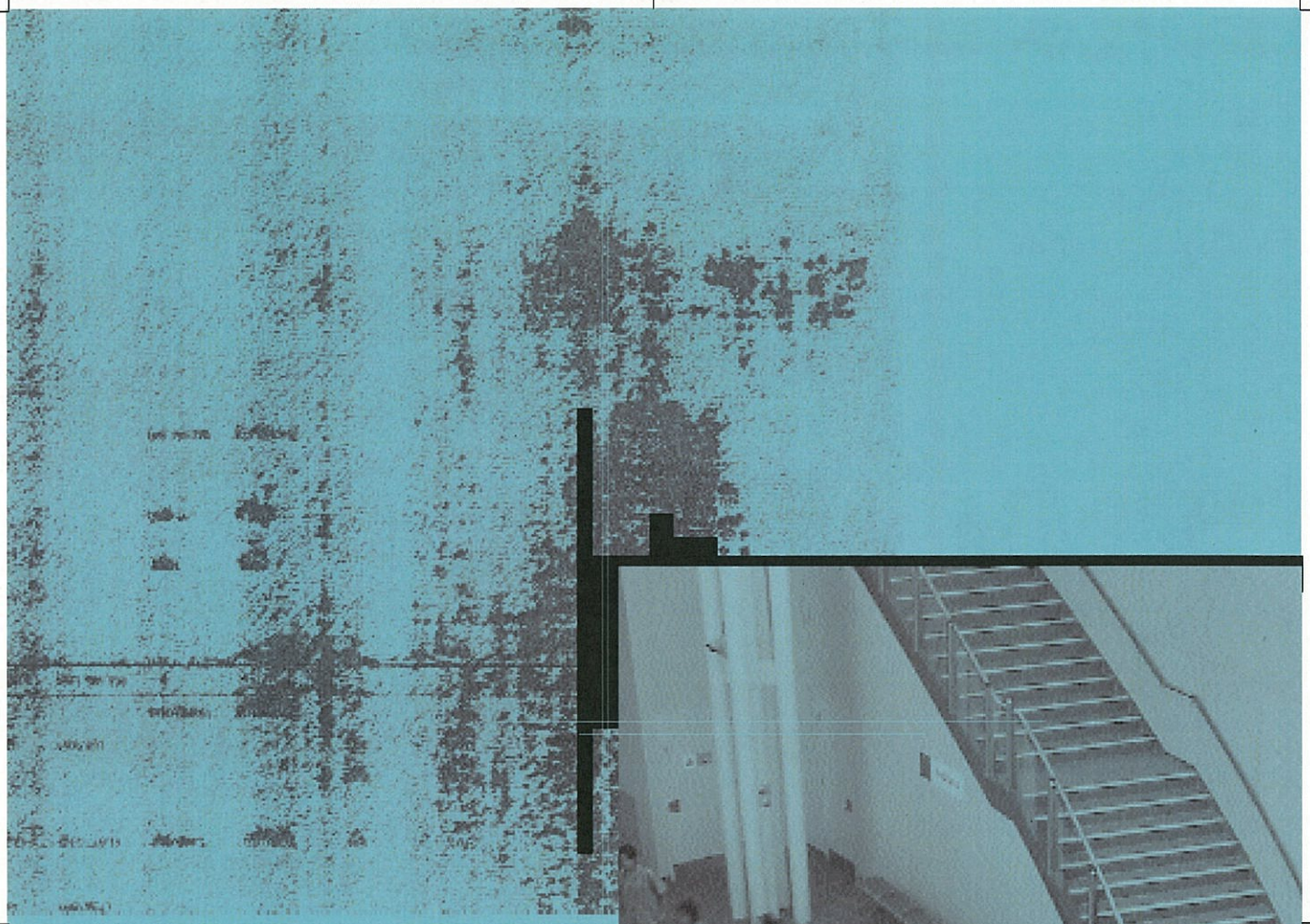
GOVERNMENT OF
WESTERN AUSTRALIA
Ministry for Planning

17 Hood Street, Wembley WA 6014 Ph: 9388 3449 Fax: 9388 3412

Site Design Guidelines

Subiaco Rise

SUBI CENTRO
a place for all



Subiaco Rise has been developed to offer a stimulating urban environment to its residents within the Subiaco neighbourhood.

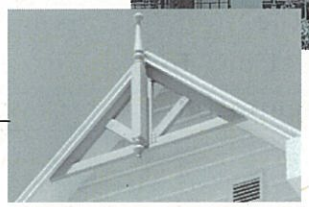
This Design Guideline Manual prescribes the standards and recommendations that will ensure that each residence of the Subiaco Rise development forms part of a community that values investment and quality of design and construction.

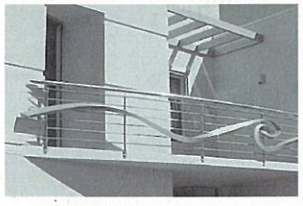
The development control provisions of this Manual will be given full regard by the Authority in any development application. To depart from these provisions will require full and substantiated justification.

The provisions of this Manual prevail to the extent of any inconsistency with the provisions of the Subiaco Redevelopment Planning Policies and the Subiaco Redevelopment Residential Design Manual.

1. HOUSING IN SUBI RISE

1.1 Being Neighbourly
Although not especially high, the general residential densities within Subiaco Rise are greater than standard suburban locations. This density is to take the form of smaller single residential lots, terrace housing and units. As density increases, being a good neighbour becomes all the more important, particularly with regard to the design of the building and its surrounds.





Building character, overshadowing, overlooking and landscaping are a few of the subjects to be covered by this manual that, when handled correctly in design and implementation terms, add immeasurably to the livability of the neighbourhood. After all, we are all someone else's neighbour and if everyone does the right thing urban harmony should prevail.

1.2 Form and Character
The pattern, scale and type of residential development that are characteristic of other successful streets and precincts in Subiaco ensure the high standard of liveability in those neighbourhoods. Generally it is important that:

+ Housing forms reflect the relatively intimate, village like character of Subiaco, with a similar mix of styles and densities;
+ Residential buildings should be orientated to the street whilst being designed in awareness of other issues of public/private spaces and interfaces and perceived and real security for users;
+ Housing types are able to be adapted in the future to serve the evolving needs of subsequent owners; and
+ Residential development is energy efficient and sensitive to the need for water conservation.

It is strongly recommended that new landowners or their architect/designer approach the Town Planners at the Authority with a concept plan at the earliest stage of design development to aid in expediting the planning approval process.

2. AREA COVERED BY GUIDELINES

These guidelines apply to all lots within the Subiaco Rise estate east of Tighe Street, north of Price Street and south of the Subiaco Common (the 'Common') within the Price Street Precinct, as shown in Figure 1.

3. SITE PLANNING

There are four general types of housing lots including: 'terrace' lots that generally abut the Common and Price Street; 'single dwelling' lots that abut all internal roads and Tighe Street; 'grouped dwelling' lots that are the larger lots capable of accommodating multiple dwellings; and 'special needs' lots that are Lots 505 to 507 located near the corner of Tighe Street and Laurino Terrace. The terrace lots sizes generally range from 174m2 to 245m2. The single dwelling lots range from 253m2 to 417m2, the 'grouped dwelling lots are Lots 533 to 535 abutting Laurino Terrace.

Amalgamation of lots (to form larger development sites) or subdivision of single house lots will not be permitted, other than the special needs lots for which the boundaries may be adjusted to accommodate an approved housing design.

3.1 Setbacks and Heights
Buildings must be setback within the parameters as detailed in Table 1 - Site Design Guidelines.

For the purpose of determining setbacks for the terrace lots abutting the Common, the 'front' of the dwelling shall be the elevation abutting the Common.

Dwellings constructed on Lots 444 and 445 shall be developed with a two storey parapet wall on the dividing property boundary setback at exactly two metres from where the dividing property boundary intersects with the property boundary abutting the Common.

It should be noted that in measuring front setbacks, where a maximum setback must be met, the front façade of the development must read as being reasonably substantial. For example, an open verandah is considered inadequate, a good portion of the building's front wall must meet the maximum setback requirements.

Side Setbacks

Side setbacks and permitted side openings shall generally be in accordance with the Residential Planning Codes of Western Australia, although variations to these requirements may be supported provided the development:

- Complies with this manual's solar access requirements; and
- Does not impinge on the privacy of adjoining properties.

Developments on terrace lots are encouraged to build from side boundary to side boundary.

For details of required setbacks see Table 1 - Site Design Guidelines.

Development on the single dwelling lots are permitted to construct up to the side boundaries at the ground level only. All upper storey walls shall generally conform to the setback requirements of the Residential Planning Codes.

Development is permitted to the rear boundary excluding any services easements, with the exception of all garages that must be setback one metre from the rear boundary.

Building Height Limits

Building heights on lots within the subdivision vary according to the particular lot (see Table 1). Generally, all single residential and terrace style housing abutting Price Street is limited in height to two storeys or nine metres. The terrace style lots abutting the Common are permitted to be three storeys or twelve metres in height.

All dwellings shall be a minimum of two storeys with the exception of the special needs housing on Lots 505 to 507 Laurino Drive that may be single storey dwellings, but are limited to a maximum of two storeys or nine metres in height.

Building height is defined as finished site level to the highest point of roof. Variations to this height limit may be supported provided they are of a minor nature, such as chimneys and finials etc.

For details of building height limits see Table 1 - Site Design Guidelines.

3.2 Solar Access and Energy Efficiency

The house should be designed so that the most used daytime rooms are orientated to receive the maximum amount of northern winter sun whilst at the same time preserving solar access to adjoining properties. To this effect, no building should cause more than 50% of an adjoining lot to be in shadow at noon on June 21 or reduce sunlight to the principal area of ground level open space of adjacent residential properties to less than three hours between 9am and 3pm on June 21.

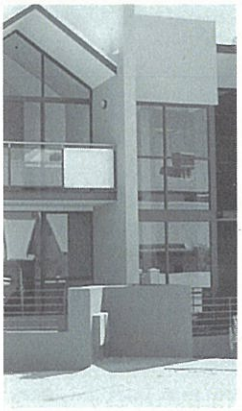
The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

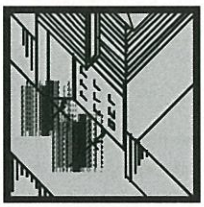
Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

3.3 Levels

Changing lot levels from those provided by more than 300mm will not be permitted. Dwellings to be constructed on sloping lots will need to step their dwelling to follow the contour of the land. The finished floor level of Lots 448 to 460 abutting the Common must be within 300mm of the footpath level abutting their property next to the Common.

The dimensions and positions of all proposed retaining walls should be provided with your development application.





3.4 Vehicles and Garaging
The Redevelopment Scheme requires each house to provide at least one covered car bay on site although it is preferable that two be provided. These car bays must be accessed from the rear lane/mews where provided.

All vehicle access gates, garages or carports must be setback one metre from the rear boundary with a 45 degree truncation from the structure to the boundary. Rooms above the garage may be cantilevered out to the boundary line. The floor level of the garage or carport must be within 200mm of the finished level of the laneway at the boundary.

Access to Lot 534 is encouraged to be via Minerva Lane, however a driveway leading into a common access area may be provided via Laurino Terrace, but no garaging shall directly front Laurino Terrace.

4. BUILDING FORM

4.1 Appearance
It is intended that houses within the Subiaco Rise subdivision will be representative of the 'New Style of Australian Housing' as has been built in nearby Subiaco Gardens. Houses should incorporate some of the design elements of housing typical of Subiaco and parts of Wembley. New dwellings must be a minimum of two storeys (excluding the special needs housing) have similar volumes, proportions and details such as verandahs and fenestration patterns.

Your house must include elements such as pitched roofs (35-45 degrees), eaves, vertically oriented windows, verandahs, corrugated iron, stonework (limestone), face brick, higher than standard floor to ceiling heights, verandahs and formal residential entries.

The house should enable "eyes on" the street, walkways, mews or public open space for passive surveillance from living rooms and balconies.

4.2 Plot Ratio and Site Coverage
The maximum plot ratio for all lots within the subdivision is 1:1.

Plot ratio is defined by:

> "the ratio of the gross floor area of a building to the site on which the buildings is, or is to be, erected"

Gross Floor Area is defined as:

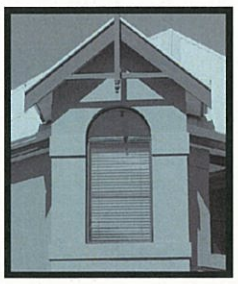
> "the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls, excluding lifts, stairs or stair landings, machinery rooms, air conditioning equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles, lobbies or amenities common to more than one dwelling or occupancy, or private open balconies."

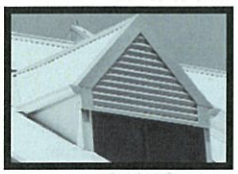
Additionally, livable areas within roof spaces will not be included in gross floor area calculations provided the elevations clearly depict the floor being a loft within the roof and not an additional storey.

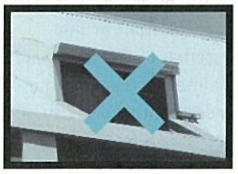
For details of maximum site coverage see Table 1 - Site Design Guidelines.

4.3 Roofscape
Roofs shall be pitched between 35-45 degrees where visible from public areas, streets and mews with a shallower pitch acceptable for verandahs, canopies and small areas of skillion and flat roofs behind parapets. All roofs shall incorporate overhangs, eaves of at least 300mm and where appropriate, verandahs.

As the use of roof space is encouraged, appropriately proportioned dormer windows (as shown) and skylights can add interest to the external appearance of a roof and break up its volume. The use of gables fronting the street is required to add further interest to the streetscape and your house. Hip roofs are generally not permitted.







4.4 Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

These areas should be securely enclosed (fenced and gated), be clearly visible from the living area(s) of the dwelling to enable young children to play in a safe environment, be in one area not many smaller areas, and may be paved, grassed and include trees but not large planting beds. The area is not intended to be walled with a roof but may be covered with a pergola or weatherproof canopy. (Please note that all shade sails and canopies require the prior written approval of the Authority in addition to a Building Licence being obtained from the City of Subiaco). Depending on design, this open space could be located on the first floor of a dwelling. The recommended minimum private outdoor areas for single residential dwellings are:

+ 30sq.m for a 2 bedroom dwelling;
+ 40sq.m for a 3 bedroom dwelling;
+ 50sq.m for a 4 bedroom dwelling; and

for terrace house lots the private open space should be:

+ 20sq.m for a 2 bedroom dwelling;
+ 30sq.m for a 3 bedroom dwelling; and
+ 40sq.m for a 4 bedroom dwelling.

All of these areas should have a minimum dimension of four metres.

Dwellings within a grouped housing development at ground level are to be provided with private open space of no less than 16m2. All dwellings above ground level shall be provided with a private balcony of no less than 4m2 with a minimum dimension of 1.5 metres. Such balconies shall be accessed directly off a 'living' space and not provided with sole access via a bedroom.

4.5 Vehicle Access Gates, Carports, Garages and Storage Areas

All garages and carports are to be setback one metre from the rear boundary to enable adequate manoeuvring space into the site. Habitable rooms may be built into the space above garages and may overhang this setback, extending out to the lot boundary.

It is important that garages (particularly doors), carports and parking areas be detailed to reduce their visual impact and add interest at ground level. Generally the materials used in the garage should match that of the house.

Garage and carport details must be approved at the same time as the house even if it is intended not to construct them at the same time. The required storage area (refer Section 7.10) may be integrated within the carport or garage.

No garage door shall open in a manner that protrudes into the adjoining laneway, both during operation and at rest.

5. MATERIALS

5.1 Walls

It is a requirement that exterior walls of houses (facing the street or other public areas) utilise face brick or rendering and incorporate the use of detailing to break up large areas to add interest and individuality. The use of limestone, carved or shaped wood, weatherboard, steelwork, painted brickwork and different colours also adds to the interest and texture of the dwelling. The Authority should be contacted for colours and materials that are permitted within the Precinct.

As a minimum, all visible external faces of parapet walls must be finished in the same manner as the remainder of the façade of the dwelling. Where a parapet wall forms a courtyard wall for the adjoining dwelling that is not visible from a public area, then the owner of the wall is required to appropriately finish the wall and is therefore strongly encouraged to liaise with the adjoining/affected landowner with regard to the finish or colour of such wall.

Where a lot abuts a parking lot, the abutting wall may be of a solid construction provided it is finished in the same manner as the façade of the dwelling to the satisfaction of the Authority. Windows or "eyes on" development overlooking the car parking lots is, however, still encouraged.

5.2 Windows

Windows, particularly those that face the street, should generally have a vertical proportion. This design element adds to the objective of encouraging a vertical emphasis, which is an important factor when considering the size and width of the lots.

Detailing of the window frame itself and around the windows in the sills is encouraged. Whilst leadlight and patterned glass as a highlight is desirable, the use of tinted or reflective glass will not be permitted if able to be viewed from the street or public area. Remember, windows and glass doors facing the street can be whatever size is appropriate while windows on the side of your house will be required to be designed to take into account the issue of overlooking.

5.3 Roofs

Lighter coloured (i.e. not darker than the BHP "Colorbond" colour "Armour Grey") colorbond roofs (contact the Authority's Planners for other approved colours) are permitted as are traditional terracotta (marseille style) coloured tiles. Other coloured tiles are not permitted. Zincalume may be permitted provided the reflective qualities do not adversely impact upon neighbouring lots. Should the Authority consider a zincalume roof does adversely impact on the amenity of a nearby lot, then the owner may be required by the Authority to implement measures to alleviate the concern.

6. LANDSCAPING

6.1 Front Gardens

Front gardens add a great deal of character to the streetscape. As the lots are comparatively small, the front gardens and courtyards of most lots will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

In most residential areas it is normally the owner/occupier's responsibility to maintain the verge as it abuts their property. All dwellings shall have a tap located on or near the front of the dwelling to allow for the watering of the front yard and/or verge. Should the maintenance and/or the watering of the verge be undertaken by the City of Subiaco, then the City may charge a levy for undertaking such works.

6.2 Recommended Plant Species

Trees

- Delonix regia (Poinciana)
- Erythrina indica (Coral Bean)
- Morus alba Var. pendula (Weeping Mulberry)
- Sapium sebiferum (Chinese Tallow Tree)
- Tipuana tipu (Pride of Bolivia)
- Ulmus parvifolia (Chinese Elm)

Shrubs Sun

- Abelia 'x' grandifolia
- Agapanthus orientalis
- Buxus sp.
- Gardenia sp.
- Hebe sp.
- Plumbago sp.

Semi Shade

- Azalia sp.
- Camelia sp.
- Dicksonia antartica
- Fatsia japonica
- Hydrangea sp.
- Viburnum sp.

Ground Covers / Climbers

- Bouganvillea
- Hedera sp.
- Hardenbergia sp.
- Lantana sp.
- Wisteria sinensis
- Mandevilla sp.

Hedges

- Buxus heterophylla (English Box)
- Rosmarinus "Blue Lagoon" (Rosemary)
- Royena
- Plumbago auriculata

7. OTHER CONSIDERATIONS

7.1 Site Services

All site services (sewerage, water, power, gas and telephone) will be via the rear lanes and enter the property at a dedicated access easement, most of which are approximately one metre by one metre in area (or one metre by two metres where they include a street light or service only one property). These easements are located in a rear corner of the lot to minimise intrusion on your development area and have been identified on Figure 1. Through consultation with the relevant authorities the services may be lowered by your builder to enable better vehicle access to garaging. In all circumstances this easement shall be either landscaped or brick paved to enhance the aesthetics of the lane.

7.2 Fencing

Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. However, for security it is recognised that the need for taller fences is legitimate. To achieve the same visual effect it is therefore important that your front fence be no higher than 1.2 metres and be at least 70% visually permeable. This includes all terrace lots that directly abut the footpath abutting the Common.

Fencing of the front of your lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are permissible.

Letterboxes should be incorporated into the fence and clearly show your house number. For terrace Lots 431 - 462 abutting the Common and Lots 526 to 533 Laurino Terrace provision should be made for the letterbox to be installed within the rear fence or portion of dwelling abutting the rear lane or mews. For such lots abutting Laurino Terrace, house numbers must be clearly displayed at both the front and rear of the dwelling.

Side fences (within the front setback of the house) must be no higher than 1.2 metres and be constructed of the same or matching materials as those used in the front fence. Fibrous cement fencing (i.e. 'Supersix') is not to be used within the front setback area or where it can be seen from public areas.

Those lots where the side fence abuts a street (refer Table 1: Site Design Guidelines) may be permitted to have a 1.8 metre high fence to screen a private courtyard area. In these instances it is strongly encouraged that such fencing be largely open in design with privacy being provided by the way of hedging, or the use of alternative fencing materials such as timber slats. A solid fence with little or no articulation will not be permitted.

Park front boundary fencing will be provided for Lots 431 to 447 and Lots 461 and 462 abutting the Common. This fencing cannot be extended or altered in any way and no direct access to the adjoining footpath or parkland will be permitted from these lots unless provided for by an existing stairway constructed by the Authority. Any side fencing within the front setback area shall be no higher than the piers for existing boundary fencing provided by the Authority. For the remainder of the fencing on site, there are no constraints except that where possible they should complement the materials used in the house and be no more than 1.8 metres in height. Blank walls visible from the street will not be permitted.

7.3 Retaining Walls

Due to the natural contour of the land retaining walls will be constructed abutting Lots 526 to 533 Laurino Terrace, Lots 502 to 504 Trillo Road and Lots 461 and 462 Rosello Lane. These retaining walls contain shared openings and steps to provide access from the lot to the footpath. All retaining walls and openings are not to be altered or extended in any way. The design and level of the dwelling must take into account the height of the retaining wall and the location of the opening. Any fencing that is installed on top of these retaining walls must be submitted to the Authority for approval and be 70% visually permeable, limited to 1.2 metres in height and be constructed to the structural and safety requirements of the City of Subiaco.

Any dwelling that is constructed abutting an existing retaining wall must, at the time of working drawings, provide the Authority with a certification from a qualified engineer clearly stating that the construction of the dwelling will not cause any additional loads to be placed on the existing wall.

All other privately created retaining walls should be kept as low as possible and in no circumstances be greater than 700mm in height, above the finished level of the adjoining footpath, street or laneway level as the case requires.

7.4 Rubbish Bins
Garbage collection will be via the rear laneway. Each dwelling shall provide for a storage area for large PVC wheeled bins at the site planning stage, to ensure that adequate provision is made for their storage in an area that is not visible from the laneway. (e.g. within a garage or drying court). A paved area should then be provided within the one metre setback between the laneway and the dwelling where the bin can be placed on rubbish collection day. All occupants are encouraged to remove their bin from the laneway as soon as possible after it is emptied.

7.5 Lighting
Front yard and house-front lighting is encouraged for both security and aesthetic reasons but care should be taken to ensure it does not shine directly into neighbouring properties.

7.6 Air Conditioners
As air conditioners can often be noisy, it is important that these be located in areas that minimise the impact on your neighbours. No air conditioner should be located directly abutting a neighbouring courtyard or bedroom window and where noise or appearance may cause a concern.

The provision of air conditioning units that have an outside unit provided at ground level is encouraged.

Roof mounted air conditioners are often unsightly and should be located at the rear of your roof where they cannot be viewed from the street, public areas or public open space and not easily seen from your neighbour's property.

Air conditioning units, pool filtration equipment, motors, pumps and mechanisms shall be suitably located and enclosed as necessary to comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

All air conditioning units require the prior written approval of the Authority. Ideally details of the type and proposed location of air conditioning units should be provided to the Authority with your working drawings.

7.7 TV Antennae, Satellite Dishes & Radio Masts
TV antennae are to be located within the roof space wherever reception permits. Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

7.8 Solar Collectors
Solar collectors must not be visible from the street or a public area. These should be installed on the plane of the roof at the rear and ideally the storage tanks located within the roof space. If it is absolutely necessary to use a stand to change the angle of the collector then again it must not be visible from the street and not easily viewed from the neighbour's property.

7.9 Clothes lines and Drying Areas
These should be located to maximise use of winter sunshine without being able to be seen from public areas.

7.10 Storage Area
Providing for outdoor storage space is important and done most effectively at the design stage. It is a requirement that each house provide for a functional and secure storage area of at least four square metres that is fully integrated into the dwelling or garage.

7.11 Stormwater
All stormwater must be contained on site. Storm water retention must be indicated on the plans submitted at working drawing stage.

8. APPROVALS

8.1 All Development

The Subiaco Redevelopment Act 1994 states that the carrying out of any development within or partly within the Redevelopment Area requires the approval of the Authority.

Development is defined as:

"(a) the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land;

(b) a material change in the use of land; and

(c) any other act or activity in relation to land declared by regulation to constitute development, but does not include any work, act or activity declared by regulation not to constitute development (eg. maintenance work on government utilities)."

Your development application will be referred to the City of Subiaco and the Town of Cambridge, for their comment prior to the Authority making a decision, however, separate approval from the City of Subiaco is not required.

The usual local government Building and Health By-Laws remain in force and Licences must still be obtained, whenever necessary, directly from the City of Subiaco.

8.2 The Application

An application for approval to commence development is required to be made by completing Form 1 (available from the Authority and the City of Subiaco) and submitting it to the Authority together with the appropriate application fee, such plans and other information as the Authority may reasonably require.

Generally the Authority will require the following information to be provided with an application for approval to commence development:

+ six (6) copies of a plan(s) to a scale of at least 1:500, showing:
  i) the subject land and proposed location of all buildings to be developed with clear dimensions indicating the distance such building(s) are to be located from the property boundaries;
  ii) all floor plans and elevations (and sections if required) of any building to be erected, including details of materials of construction, finishes and external colours;
  iii) the existing and the proposed means of access for pedestrians and vehicles to and from the land;
  iv) the location, number, dimension and layout of all car parking spaces intended to be provided; and
  v) the location, dimensions, design and particulars of the manner in which it is proposed to develop any landscaped area, including the retention of existing trees and other vegetation, fences and walls.
+ a statement of or plans indicating the impact of the proposed development on the streetscape, views, privacy and overshadowing.
+ a statement setting out details of the intended use and the way in which that use is proposed to operate.
+ details of all signs and advertising structures.
+ any other plan or information required to be provided pursuant to the Redevelopment Scheme or which the Authority may require to enable the application to be determined.

A fee is required to be paid for any development application relating to land within the Scheme Area. The fee is scaled according to the value of the proposed development. A schedule of fees can be obtained by contacting the Authority's Planners on (08) 9388 3449.

The Authority aims to determine all applications within 60 days of lodgement of which 42 days is required to be allocated for consultation with the City of Subiaco and Town of Cambridge.

TABLE 1: SITE DESIGN GUIDELINES

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m) excluding garage	Height (m)	Max. site coverage (%)	Side fence treatment
431	204	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	4
432	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
433	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
434	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
435	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
436	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
437	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
438	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
439	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
440	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
441	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
442	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
443	196	1	1 - 3	Nil	Nil	12m or 3 storeys	80%	
444	309	1	1 - 3*	Nil	Nil	12m or 3 storeys	80%	
445	282	1	0 - 2*	Nil	Nil	12m or 3 storeys	80%	
446	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
447	187	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
448	203	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
449	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
450	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
451	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
452	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
453	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
454	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
455	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
456	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
457	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
458	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
459	185	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	

* Lots 444 and 445 must have a parapet wall on their common dividing boundary setback at exactly two metres from the boundary abutting the Common.

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m) excluding garage	Height (m)	Max. site coverage (%)	Side fence treatment
460	185	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
461	185	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
462	220	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	4
463	316	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
464	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
465	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
466	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
467	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
468	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
469	326	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
470	326	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
471	326	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
472	303	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
473	364	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
474	304	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
475	304	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
476	292	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
477	293	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
478	293	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
479	281	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
480	329	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
481	390	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
482	360	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
483	330	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
484	330	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
485	330	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
486	330	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
487	297	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
488	309	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m) excluding garage	Height (m)	Max. site coverage (%)	Side fence treatment
489	303	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
490	312	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
491	314	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
492	370	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
493	417	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
494	367	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
495	317	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
496	330	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
497	330	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
498	286	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
499	309	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
500	366	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
501	253	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
502	300	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
503	328	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
504	335	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
505	335	2	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
506	335	2	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
507	540	3	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
508	212	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
509	237	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
510	245	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
511	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
512	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
513	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
514	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
515	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
516	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	
517	174	1	0 - 2	Nil	Nil	9m or 2 storeys	80%	

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m) excluding garage	Height (m)	Max. site coverage (%)	Side fence treatment\
518	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
519	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
520	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
521	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
522	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
523	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
524	174	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
525	199	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	4
526	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	4
527	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
528	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
529	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
530	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
531	345	1	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
532	345	1	2 - 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
533	496	2	2 – 4	Nil & Upper level as per R-Codes	Nil	9m or 2 storeys	70%	
534	2006	12	0 – 2 (Price Street) 2 – 4 (Laurino Terrace) 2 – 4 (Tighe Street)	Nil (To East)	Nil (To Lane)	9m or 2 storeys (Measured from Price Street) 11m or 3 storeys (Measured from Laurino Terrace)	70%	4
535	1236	8	2 – 4	2 – 4 (Includes East Boundary)	Nil	9m or 2 storeys	70%	4

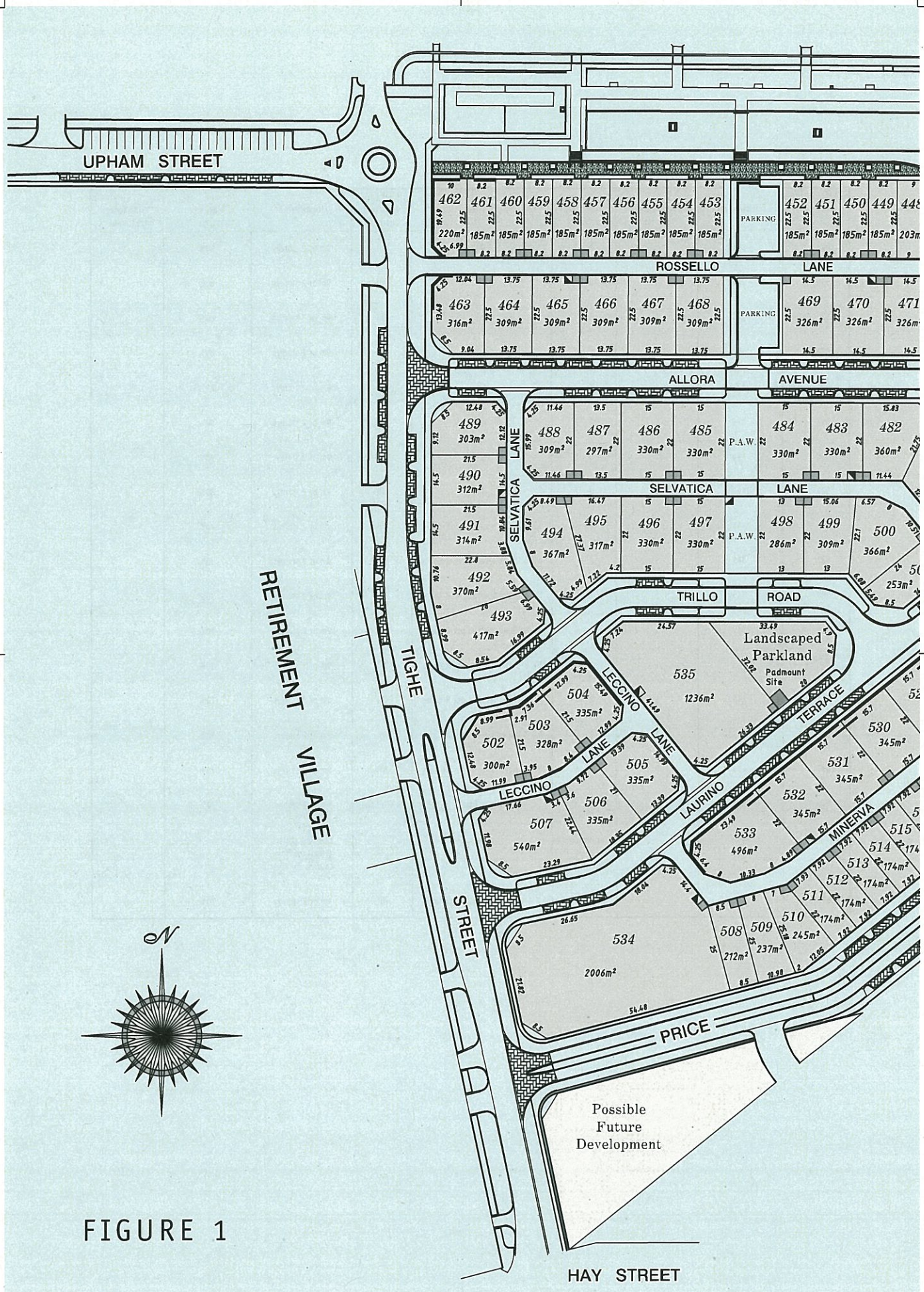
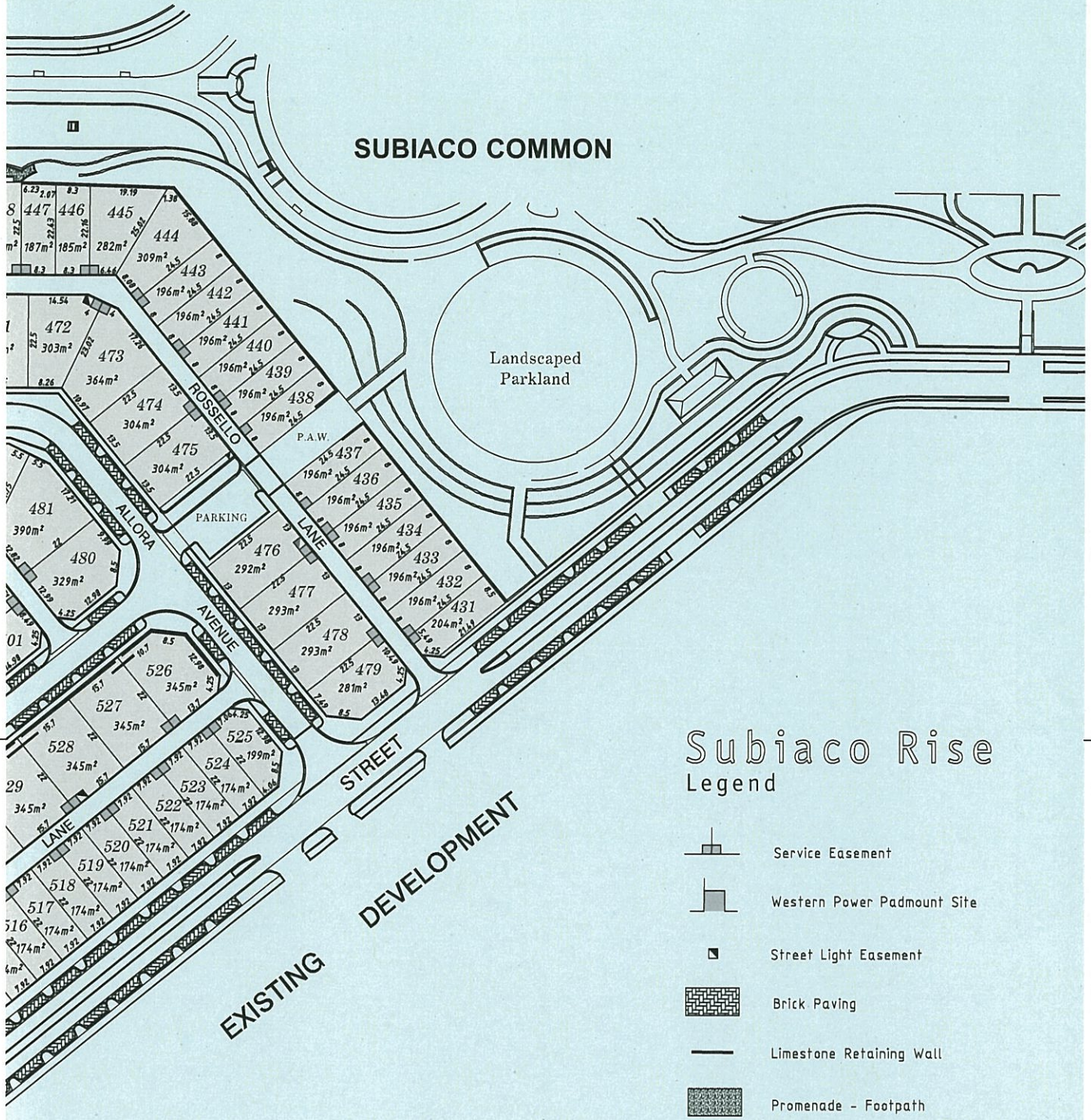

UPHAM STREET
ROSSELLO
LANE
PARKING
ALLORA
AVENUE
SELVATICA
LANE
P.A.W.
TRILLO
ROAD
Landscaped Parkland
Padmount Site
LECCINO
LANE
TERRACE
LAURINO
MINERVA
PRICE
TIGHE
STREET
RETIREMENT VILLAGE
Possible Future Development
HAY STREET
N

FIGURE 1



Subiaco Rise

Legend

- Service Easement
- Western Power Padmount Site
- Street Light Easement
- Brick Paving
- Limestone Retaining Wall
- Promenade - Footpath

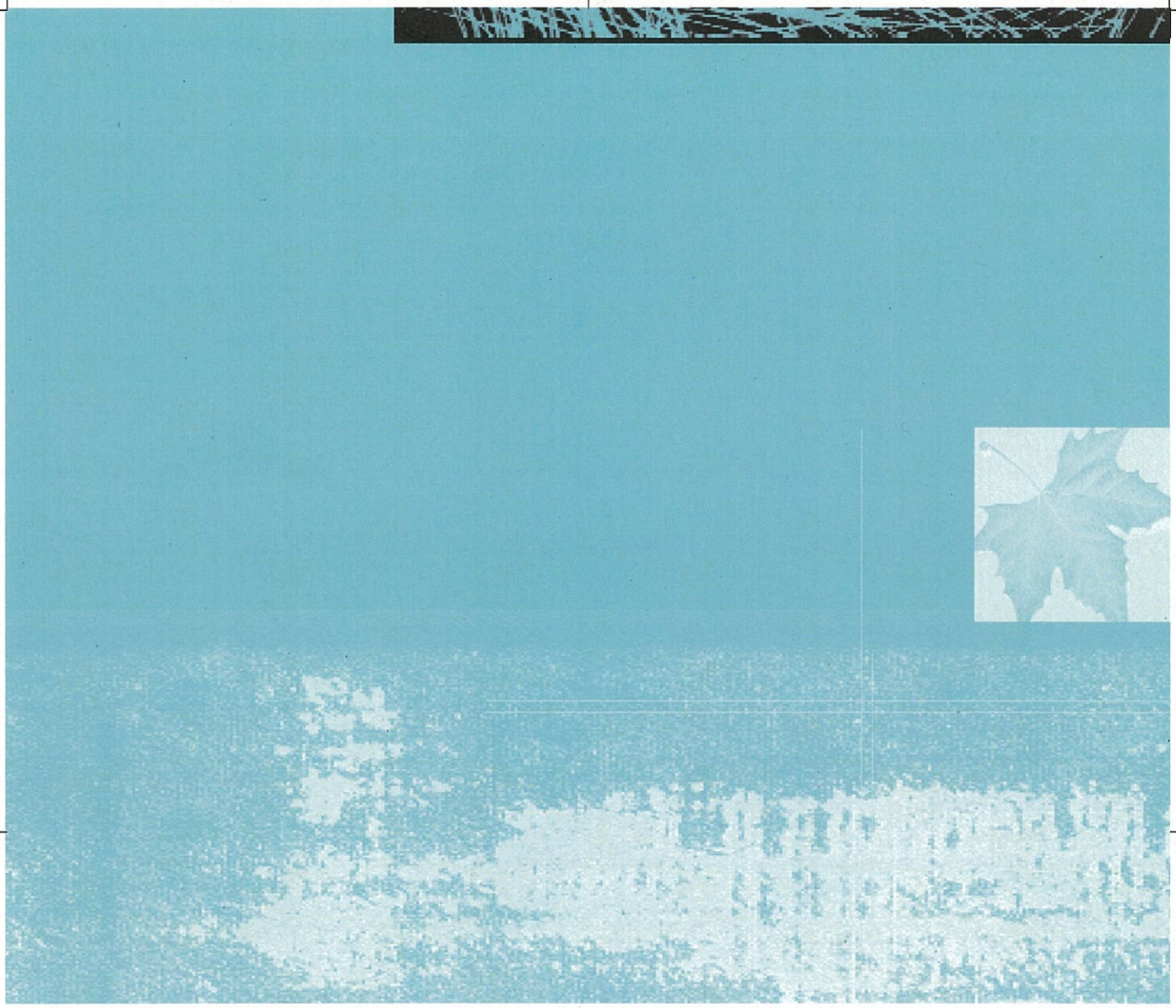
20 0 80

ALL DISTANCES ARE IN METRES

SUBIACO
REDEVELOPMENT
AUTHORITY

The particulars set out on this plan, including use and dimensions, are for guidance and shall not be taken as representations or warranties by the Vendor or its Agents and a purchaser should satisfy itself by inspection and enquiry as to the correctness of each item.

Subiaco Rise Site Design Guidelines



Further information on any aspect of these guidelines
can be obtained by contacting the Authority's Planning Manager on (08) 9388 3449.

SUBIACO REDEVELOPMENT AUTHORITY
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SUBIACO WA 6904

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sra@sra.wa.gov.au

GOVERNMENT OF WESTERN AUSTRALIA

SUBIACO
REDEVELOPMENT
AUTHORITY

PRICE STREET PRECINCT

STAGE 2
DRAFT
SITE DESIGN GUIDELINES
(LOT 545 HAY STREET)

SUBIACO
REDEVELOPMENT
AUTHORITY

March 2003

PRICE STREET PRECINCT
STAGE 2 SITE DESIGN GUIDELINES (LOT 545 HAY STREET)

Context

Refer to the Subiaco Redevelopment Scheme Text 1996 ('Scheme') - Statement of Intent, Preferred Land Uses and Plot Ratios and the Subiaco Redevelopment Authority's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to Lot 545 on the corner of Hay, Tighe and Price streets as shown on the plan titled "Lot 545 Hay Street".

Relationship to Planning Scheme and General Planning Policies

The "Preferred" and "Potential" land uses for the Price Street Precinct are detailed within clauses 42 and 49 of the Subiaco Redevelopment Scheme ("Preferred" use is "Category 4: Residential"). General Policies and Precinct Planning Policies applicable to this area are outlined in the planning policies appurtenant to the Scheme.

These guidelines known as the 'Price Street Precinct Stage 2 Design Guidelines' are a Design Manual prepared and adopted pursuant to Part 5 of the Subiaco Redevelopment Scheme 1996.

These guidelines are intended to supplement the provisions of the Subiaco Redevelopment Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

Desired Character

Lot 545 is a gateway/landmark site and therefore it is the Authority's intention that this lot be developed to accommodate a high quality, predominantly residential development with a commercial interface being provided at the ground level facing onto Hay and/or Tighe streets. As uses of a commercial nature are not included within the list of "Preferred" or "Potential" uses within the Precinct, any application received involving a commercial component will need to be advertised in accordance with Clause 41(4) of the Scheme.

Aside from residential, other commercial uses that may be appropriate on the ground floor facing Hay Street include offices or showrooms where the business can be undertaken without impacting on the amenity of the remaining residential uses on site. Designs accommodating home based businesses are considered appropriate.

The emphasis is to create a development that provides for an active and pedestrian friendly commercial frontage interfacing with the Hay/Tighe Street corner and a high quality residential development with detailed façades on the on the remainder of the development.

Building Envelope

The building height and bulk shall be contained within a defined building envelope extending above and below the property boundaries with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows. (Refer to plan 'Lot 545 Hay Street' for details).

Lot 545 is perceived to be a prominent site that forms an entry into Subiaco Rise residential area and helps mark the beginning of the Centro Place commercial area. The building envelope shall have a minimum of two storeys with a maximum of three storeys with the maximum permitted eaves/parapet height above finished site level being 11.7 metres except for corner element abutting Hay and Tighe streets where the maximum height of the parapet is 13.7 metres. Development on the lot must sufficiently address all streets to which it fronts. Such heights shall be measured from the existing footpath or road level immediately abutting the development.

Building Setbacks

It is preferred that the majority of the building be constructed to abut all street boundaries with a setback of up to 3 metres being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. Whilst there is no minimum side setback for the property, any development involving a parapet wall abutting its eastern property boundary must include some detailing in the parapet wall so that there is a level of interest in this wall. It should, however, be noted that the adjoining property to the east may ultimately contain development with a nil setback abutting Lot 545. Any development on Lot 545 will also need to satisfy the fire requirements of the Building Code of Australia.

Plot Ratio

A maximum plot ratio of 1:1 applies to the development of the land.

Plot ratio is defined by:

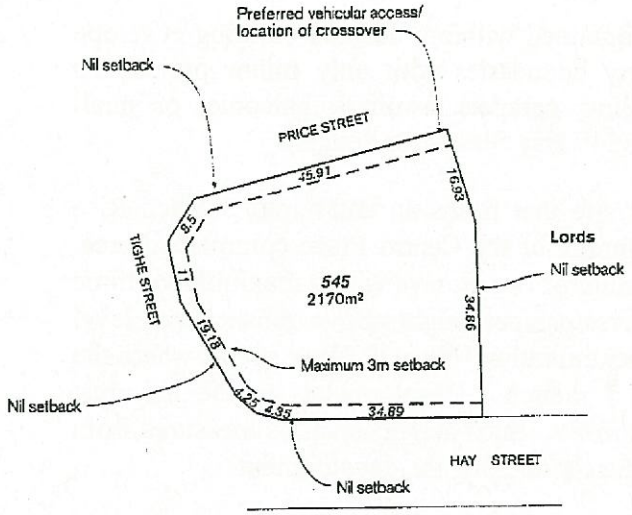
> *"the ratio of the gross floor area of a building to the site on which the buildings is, or is to be, erected"*

Gross Floor Area is defined as:

> *"the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls, excluding lifts, stairs or stair landings, machinery rooms, air conditioning equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles, lobbies or amenities common to more than one dwelling or occupancy, or private open balconies."*

Additionally, livable areas within roof spaces will not be included in gross floor area calculations.

LOT 545 HAY STREET



PLAN

* Subject to survey

SITE SPECIFIC GUIDELINES

DEVELOPMENT POTENTIAL
This lot should be developed as predominantly residential with a commercial interface provided at the ground level facing onto Hay Street.

BUILDING HEIGHT
Minimum building height - 2 storeys
Maximum building height - 3 storeys or 11.7m above finished floor level to eaves/parapet. The corner element may be constructed to a height of 13.7m.

PLOT RATIO
A maximum plot ratio of 1:1 shall apply.

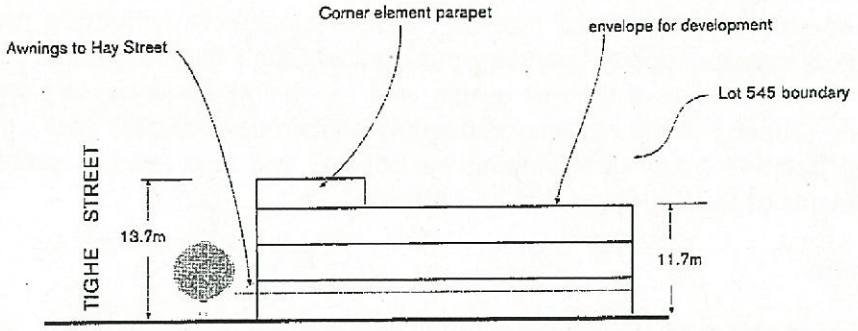
RESIDENTIAL DENSITY
The maximum residential density for this precinct is R60.

SETBACK

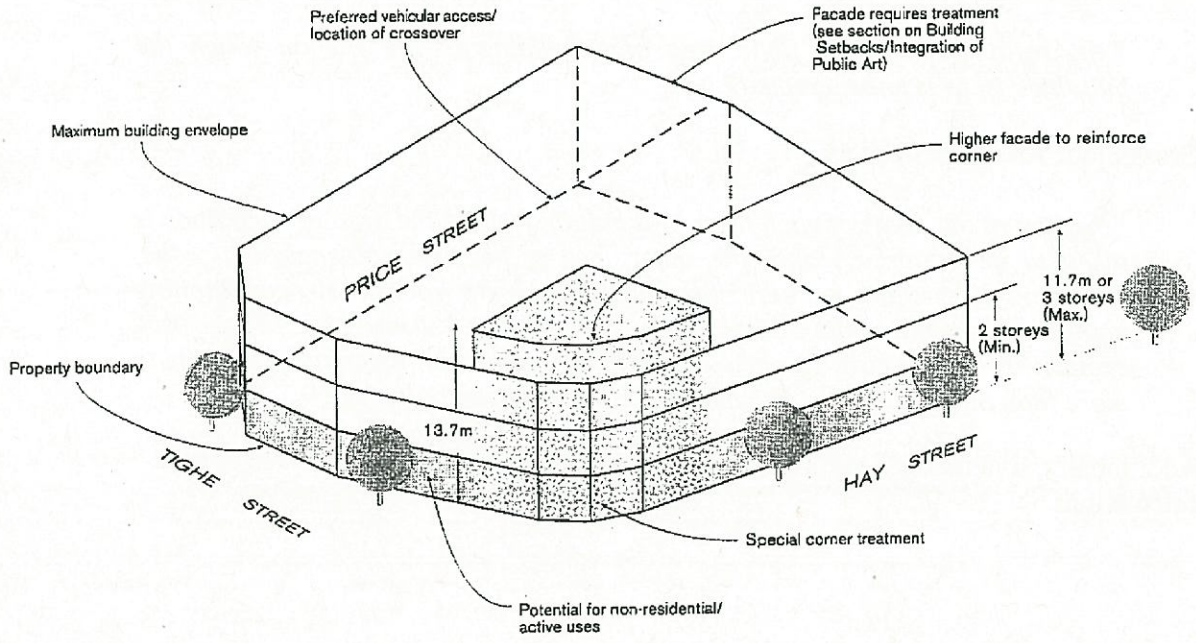
All street boundaries	*Min - nil* *Max - 3m*
Side boundary	*Min - nil*

ACCESS
The preferred vehicular access is via Price Street near the eastern property boundary.

NOTE: All building forms shown are indicative only and do not represent final outcome



HAY STREET ELEVATION



3D MODEL

Residential Density

The maximum residential density for development in this precinct is R60.

The Authority may seek the consent of the Minister to a development proposing a density of up to R80 if the development assists the Authority in achieving its diversity of housing objectives specified by Planning Policy 1.4 "Residential Development".

Building Form

As the development is likely to be a residential / mixed use building, accordingly it may have a number of different tenant spaces to accommodate different uses. Entrances to the building must be distinct and clearly identifiable within the building's facade through the use of canopies, steps, recesses, building material changes and lighting.

Awning(s) are to be provided on the 80% of building facades adjacent to the pedestrian path along Hay Street. The awning(s) should have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. A maximum awning height of 4.5 metres above the footpath is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, change of materials, areas of colonnading or small courtyards. Particular attention is to be afforded to the street level especially when considering the change in ground level across the site. Landscaped car park ventilation grilles to any basement car park are not considered an appropriate design solution on their own.

The development on the property must address and reinforce the corner through the use of parapets, fenestration, entries or roof design. The majority of the façade to Tighe Street and the façade to Price Street must be highly detailed, incorporating elements such as balconies, varied setbacks, deep window reveals, quality materials etc. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, facades and parapet detailing.

Integration of Art

Involvement of artists in designing the development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Should a parapet wall be proposed abutting the eastern property boundary where Lords Sports Club is currently located, then the Authority will require as a condition of any planning approval for the exposed portion of the parapet to incorporate detailing to provide a level of interest in this wall. The onus will be on the applicant to submit such details to the Authority for consideration and approval as part of the development application.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, fascias, gutters, parapet detailing or balustrading.

The roof must either have a minimum pitch of 30° and be constructed of terracotta clay tiles or light shades of colorbond, or have a lesser pitch/flat profile that must be hidden from view from the public realm behind a suitable parapet.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. Refer the Authority's Signage Policy for details.

Solar Access and Energy Efficiency

The building should be designed so that as many as possible of the most used daytime rooms are orientated to receive the maximum amount of northern winter sun.

The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

Dwellings within a grouped housing development at ground level should be provided with private open space of no less than 16m^2. All dwellings above ground level shall be provided with a private balcony of no less than 4m^2 with a minimum dimension of 1.5 metres. Such balconies shall be accessed directly off a 'living' space and not provided with sole access via a bedroom.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on the lot must be accompanied by an independent traffic engineering report certifying that the location of the crossover(s) is safe and satisfies the criteria of the relevant Australian Standards. It is considered that the most likely location of the crossover will be from Price Street near the property's eastern boundary.

Clotheslines and Drying Areas

Each unit shall be provided with clothes drying area where clothes can be aired and dried. Whilst it is preferable that the majority of the drying areas are exposed to winter sunshine it is essential that each drying area is screened from public areas.

Storage Area

Providing for outdoor storage space is important and most effectively done at the design stage. It is therefore a requirement that each residential unit be provided with a secure storage area of at least 4 square metres which is fully integrated into the development.

Services

Developments on all lots will have access to all urban services. The Authority has made a financial allowance for the provision of a Western Power transformer if required. The developer must undertake its own investigations as to the power supply required to service the development and if a transformer is required make allowance for its installation within the development of the site. Such transformer must be screened from view from the public realm and meet the requirements of Western Power. The developer is encouraged to make their own investigations with the Authority to ascertain the amount of the financial allowance and to ascertain and ensure compliance with any Western Power requirements.

All piped and wired services, air conditioners, hot water storage etc, should not be visible from the public realm, or located in areas where their noise and appearance has the potential to adversely impact on the amenity of adjoining residents.

Allowance must be made to a bin storage area suitable to accommodate all waste receptacles required to service the development. Such bin storage area must be provided with water wash down facilities and connected to the main sewerage network. The development must give due consideration to its location to minimise its potential impact on the amenity of the adjoining residents both in terms of odour and to minimise noise on collection days. Investigations need to be made with the City of Subiaco to ensure appropriate provision is made for the removal of the waste receptacles.

Fencing

Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. However, as security is an issue it is recognised that the need for taller fences is legitimate. To achieve the same visual effect it is therefore important that any front fence be no higher than 1.2 metres and be at least 70% visually permeable.

Fencing of the front of the lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are permissible.

Letterboxes should also be incorporated into the fence and clearly show the unit number.

Air Conditioners

As air conditioners can often be noisy, it is important that these be located in areas that minimise the impact on neighbours. No air conditioner should be located directly abutting a neighbouring courtyard, balcony or bedroom window or where noise or appearance may cause a concern.

The provision of air conditioning units that are located within a designated concealed plant room is strongly encouraged.

Roof mounted air conditioners are often unsightly and should be located either in a enclosed plant room designed as part of the building or in a central location where they cannot be viewed from the street or any other public area.

Air conditioning units, pool filtration equipment, motors, pumps and mechanisms shall be suitably located and enclosed if necessary to comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

All air conditioning units require the prior written approval of the Authority. Ideally details of the type and proposed location of air conditioning units should be provided to the Authority with the working drawings.

TV Antennas, Satellite Dishes & Radio Masts

Ideally TV antennas should to be located within the roof space wherever reception permits. As a minimum, one TV Antennae should service all units and such antennae should be positioned in a central location where it is not easily seen from public areas.

Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

Landscaping

Front gardens add a great deal of character to the streetscape. As the guidelines require 'street front' development with setbacks of only up to three metres being permitted, any front garden or will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

In most multiple unit developments landscaping is maintained by the body corporate. Due to the small size of individual landscape areas being unlikely to warrant every tenant purchasing gardening equipment all landscaping visible from the public realm should be maintained by a landscape contractor/caretaker.

As in most residential areas, it is normally the owner/occupier's responsibility to maintain the verge as it abuts their property. Provision should be made for a tap(s) to be located abutting verge areas to allow for the watering of the front yard and/or verge. Should the maintenance and/or the watering of the verge be undertaken by the City of Subiaco, then the City may charge a levy for undertaking such works.

Recommended Plant Species

TREES

Delonix reginae (Poinciana)
Eucalyptus sp.
Eucalyptus caesia (Silver Princess)
Hymenosporum flavum (Native Frangipani)
Jacaranda mimmosifolia (Jacaranda)
Olea europea (olive sp.)
Ulmus parvifolia (Chinese Elm)

SHRUBS SUN

Abelia x grandifolia
Eremophila sp.
Grevillea sp.
Lavender Sp.

Lechenaultia sp.
Leptospermum x 'Burgundy Queen'
Meterosideros sp.
Olearia axillaris
Orthosanthus laxus
Patersonia occidentalis
Westringia fruiticosa (Coastal Rosemary)

SEMI SHADE

Brachycome multifida
Dianella sp.
Dietes sp.
Gaura lindheimeri (Gaura)
Hebe sp.
Ricinocarpus 'Bridal Star'
Salvia leucantha (Mexican Bush Sage)
Strelitzia reginae

GROUNDCOVERS/ CLIMBERS

Arctotis sp. (Daisy)
Dampiera sp.
Hardenbergia sp.
Hemiandra pungens
Hibbertia scandens (Snake Vine)
Kennedia nigricans
Lantana sp.
Pandorea pandorana (Wonga Vine)
Scaevola crassifolia
Trachelospermum jasminoides
Verbena sp.
Viola hederacea

HEDGES

Buxus heterophylla (English Box)
Callistemon 'Little John'
Rosmarinus 'Blue Lagoon' (Prostrate Rosemary)
Royena lucida (Royena)
Vibernum tinus

PRICE STREET PRECINCT

STAGE 3

SITE DESIGN GUIDELINES (LOT 545 HAY STREET)

SUBIACO
REDEVELOPMENT
AUTHORITY

April 2003

PRICE STREET PRECINCT
STAGE 3 SITE DESIGN GUIDELINES (LOT 545 HAY STREET)

Context

Refer to the Subiaco Redevelopment Scheme Text 1996 ('Scheme') - Statement of Intent, Preferred Land Uses and Plot Ratios and the Subiaco Redevelopment Authority's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to Lot 545 on the corner of Hay, Tighe and Price streets as shown on the plan titled "Lot 545 Hay Street".

Relationship to Planning Scheme and General Planning Policies

The "Preferred" and "Potential" land uses for the Price Street Precinct are detailed within clauses 42 and 49 of the Subiaco Redevelopment Scheme ("Preferred" use is "Category 4: Residential"). General Policies and Precinct Planning Policies applicable to this area are outlined in the planning policies appurtenant to the Scheme.

These guidelines known as the 'Price Street Precinct Stage 2 Design Guidelines' are a Design Manual prepared and adopted pursuant to Part 5 of the Subiaco Redevelopment Scheme 1996.

These guidelines are intended to supplement the provisions of the Subiaco Redevelopment Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

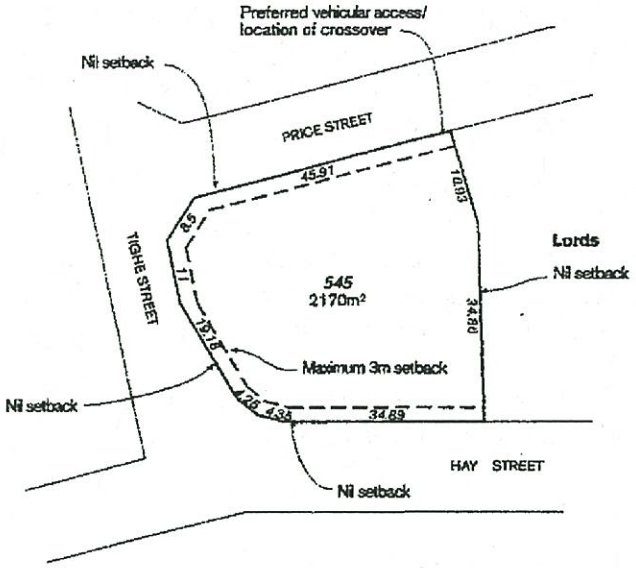
Desired Character

Lot 545 is a gateway/landmark site and therefore it is the Authority's intention that this lot be developed to accommodate a high quality, predominantly residential development with a commercial interface being provided at the ground level facing onto Hay and/or Tighe streets. As uses of a commercial nature are not included within the list of "Preferred" or "Potential" uses within the Precinct, any application received involving a commercial component will need to be advertised in accordance with Clause 41(4) of the Scheme.

Aside from residential, other commercial uses that may be appropriate on the ground floor facing Hay Street include offices or showrooms where the business can be undertaken without impacting on the amenity of the remaining residential uses on site. Designs accommodating home based businesses are considered appropriate.

The emphasis is to create a development that provides for an active and pedestrian friendly commercial frontage interfacing with the Hay/Tighe Street corner and a high quality residential development with detailed façades on the remainder of the development.

LOT 545 HAY STREET



PLAN

* Subject to survey

SITE SPECIFIC GUIDELINES

DEVELOPMENT POTENTIAL
This lot should be developed as predominantly residential with a commercial interface provided at the ground level facing onto Hay Street.

BUILDING HEIGHT
Minimum building height - 2 storeys
Maximum building height - 3 storeys or 11.7m above finished floor level to eaves/parapet. The corner element may be constructed to a height of 13.7m.

PLOT RATIO
A maximum plot ratio of 1:1 shall apply.

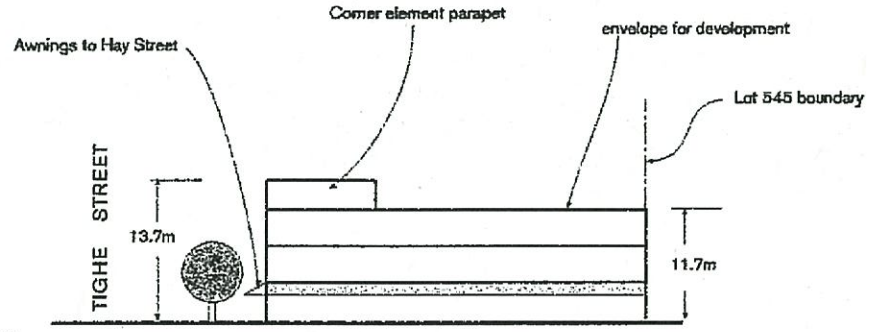
RESIDENTIAL DENSITY
The maximum residential density for this precinct is R60.

SETBACK

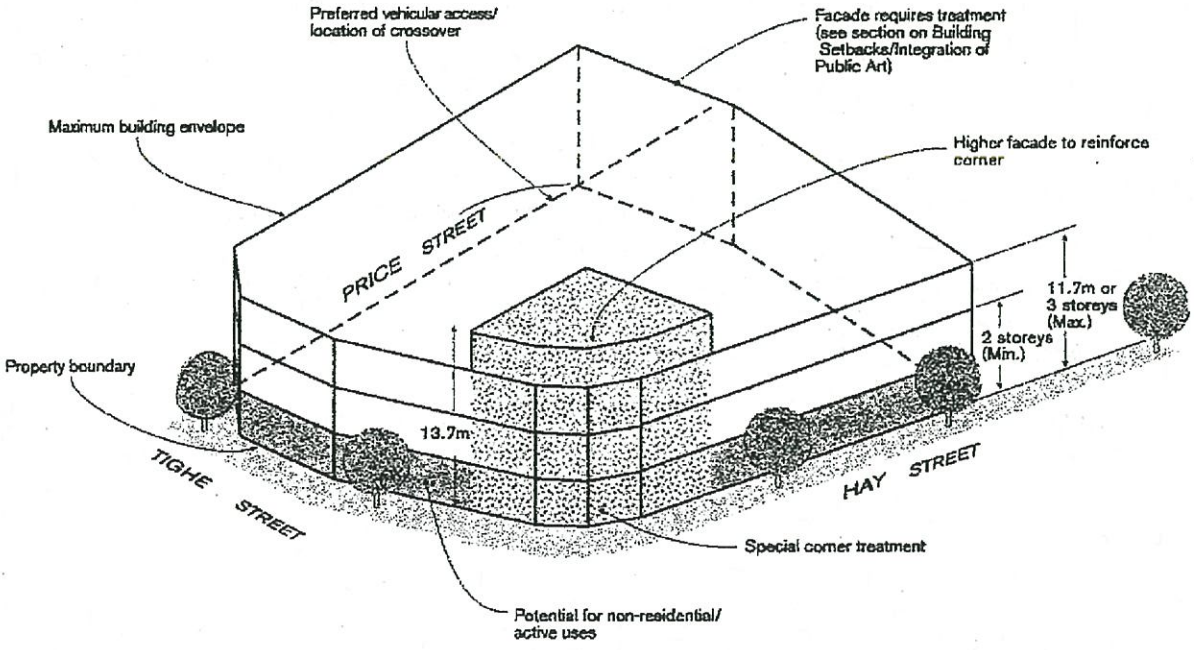
All street boundaries	*Min - nil* *Max - 3m*
Side boundary	*Min - nil*

ACCESS
The preferred vehicular access is via Price Street near the eastern property boundary.

NOTE: All building forms shown are indicative only and do not represent final outcome



HAY STREET ELEVATION



3D MODEL

Building Envelope

The building height and bulk shall be contained within a defined building envelope extending above and below the property boundaries with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows. (Refer to plan 'Lot 545 Hay Street' for details).

Lot 545 is perceived to be a prominent site that forms an entry into Subiaco Rise residential area and helps mark the beginning of the Centro Place commercial area. The building envelope shall have a minimum of two storeys with a maximum of three storeys with the maximum permitted eaves/parapet height above finished site level being 11.7 metres except for a corner element abutting Hay and Tighe streets where the maximum height of the parapet is 13.7 metres. Such heights shall be measured from the existing footpath or road level immediately abutting the development. Development on the lot must sufficiently address all streets to which it fronts.

Building Setbacks

It is preferred that the majority of the building be constructed to abut all street boundaries with a setback of up to 3 metres being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. Whilst there is no minimum side setback for the property, any development involving a parapet wall abutting its eastern property boundary must include some detailing in the parapet wall so that there is a level of interest in this wall. It should, however, be noted that the adjoining property to the east may ultimately contain development with a nil setback abutting Lot 545. Any development on Lot 545 will also need to satisfy the fire requirements of the Building Code of Australia.

Plot Ratio

A maximum plot ratio of 1:1 applies to the development of the land.

Plot ratio is defined as:

> *"the ratio of the gross floor area of a building to the site on which the buildings is, or is to be, erected"*

Gross Floor Area is defined as:

> *"the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls, excluding lifts, stairs or stair landings, machinery rooms, air conditioning equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles, lobbies or amenities common to more than one dwelling or occupancy, or private open balconies."*

Additionally, livable areas within roof spaces will not be included in gross floor area calculations.

Residential Density

The maximum residential density for development in this precinct is R60.

The Authority may seek the consent of the Minister to a development proposing a density of up to R80 if the development assists the Authority in achieving its diversity of housing objectives specified by Planning Policy 1.4 "Residential Development".

Building Form

As the development is likely to be a residential / mixed use building, it may have a number of different tenant spaces to accommodate different uses. Entrances to the building must be distinct and clearly identifiable within the building's facade through the use of canopies, steps, recesses, building material changes and lighting.

Awning(s) are to be provided on 80% of building facades adjacent to the pedestrian path along Hay Street. The awning(s) should have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. A maximum awning height of 4.5 metres above the footpath is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, change of materials, areas of colonnading or small courtyards. Particular attention is to be afforded to the street level especially when considering the change in ground level across the site. Landscaped car park ventilation grilles to any basement car park are not considered an appropriate design solution on their own.

The development on the property must address and reinforce the corner through the use of parapets, fenestration, entries or roof design. The majority of the façade to Tighe Street and the façade to Price Street must be highly detailed, incorporating elements such as balconies, varied setbacks, deep window reveals, quality materials etc. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, facades and parapet detailing.

Integration of Art

Involvement of artists in designing the development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Should a parapet wall be proposed abutting the eastern property boundary where Lords Sports Club is currently located, then the Authority will require as a condition of any planning approval for the exposed portion of the parapet to incorporate detailing to provide a level of interest in this wall. The onus will be on the applicant to submit such details to the Authority for consideration and approval as part of the development application.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, fascias, gutters, parapet detailing or balustrading.

The roof must either have a minimum pitch of 30° and be constructed of terracotta clay tiles or light shades of colorbond, or have a lesser pitch/flat profile that must be hidden from view from the public realm behind a suitable parapet.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. Refer the Authority's Signage Policy for details.

Solar Access and Energy Efficiency

The building should be designed so that as much of the private outdoor space and as many as possible of the most used daytime rooms are orientated to receive the maximum amount of northern winter sun.

The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

Dwellings within a grouped housing development at ground level should be provided with private open space of no less than $16m^2$. All dwellings above ground level shall be provided with a private balcony of no less than $4m^2$ with a minimum dimension of 1.5 metres. Such balconies shall be accessed directly off a 'living' (ie. lounge or family room) space, but should not be provided with sole access via a bedroom.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on the lot must be accompanied by an independent traffic engineering report certifying that the location of the crossover(s) is safe and satisfies the criteria of the relevant Australian Standards. It is considered that the most likely location of the crossover will be from Price Street near the property's eastern boundary.

Clotheslines and Drying Areas

Each unit shall be provided with a clothes drying area where clothes can be aired and dried. Whilst it is preferable that the majority of the drying areas are exposed to winter sunshine it is essential that each drying area is screened from public areas.

Storage Area

Providing for outdoor storage space is important and most effectively done at the design stage. It is therefore a requirement that each residential unit be provided with a secure storage area of at least 4 square metres which is fully integrated into the development, but accessed from outside the dwelling.

Services

Developments on the lot will have access to all urban services. The Authority will make a financial allowance for the provision of power to the site to a standard that would reasonably be required. The developer must undertake its own investigations as to the actual power supply required to service its proposed development and if a transformer was required make allowance for its installation within the development of the site. Such transformer must be screened from view from the public realm and meet the requirements of Western Power. The developer is encouraged to make their own investigations with the Authority to ascertain the amount of the financial allowance and to ascertain and ensure compliance with any Western Power requirements.

All piped and wired services, air conditioners, service meters, hot water storage etc, should not be visible from the public realm, or located in areas where their noise and appearance has the potential to adversely impact on the amenity of adjoining residents.

Allowance must be made for a bin storage area suitable to accommodate all waste receptacles required to service the development. Such bin storage area must be provided with water wash down facilities and connected to the main sewerage network. The development must give due consideration to its location to minimise its potential impact on the amenity of the adjoining residents both in terms of odour and to minimise noise on collection days. Investigations need to be made with the City of Subiaco to ensure appropriate provision is made for the removal of the waste receptacles.

Fencing

Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. However, as security is an issue it is recognised that the need for taller fences is legitimate. To achieve the same visual effect it is therefore important that any front fence be no higher than 1.2 metres and be at least 70% visually permeable.

Fencing of the front of the lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are permissible.

Letterboxes should also be incorporated into the fence and clearly show the unit number.

Air Conditioners

As air conditioners can often be noisy, it is important that these be located in areas that minimise the impact on neighbours. No air conditioner should be located directly abutting a neighbouring courtyard, balcony or bedroom window or where noise or appearance may cause a concern.

The provision of air conditioning units that are located within a designated concealed plant room is strongly encouraged.

Roof mounted air conditioners are often unsightly and should be located either in a enclosed plant room designed as part of the building or in a central location where they cannot be viewed from the street or any other public area.

Air conditioning units, pool filtration equipment, motors, pumps and mechanisms shall be suitably located and enclosed if necessary to comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

All air conditioning units require the prior written approval of the Authority. Ideally details of the type and proposed location of air conditioning units should be provided to the Authority with the working drawings.

TV Antennas, Satellite Dishes & Radio Masts

Ideally TV antennas should be located within the roof space wherever reception permits. As a minimum, one TV Antennae should service all units and such antennae should be positioned in a central location where it is not easily seen from public areas.

Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions such facilities may be installed.

Landscaping

Front gardens add a great deal of character to the streetscape. As the guidelines require 'street front' development with setbacks of only up to three metres being permitted, any front garden will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

In most multiple unit developments landscaping is maintained by the body corporate. Due to the small size of individual landscape areas being unlikely to warrant every tenant purchasing gardening equipment all landscaping visible from the public realm should be maintained by a landscape contractor/caretaker.

As in most residential areas, it is normally the owner/occupier's responsibility to maintain the verge as it abuts their property. Provision should be made for a tap(s) to be located abutting verge areas to allow for the watering of the front yard and/or verge. Should the maintenance and/or the watering of the verge be undertaken by the City of Subiaco, then the City may charge a levy for undertaking such works.

Recommended Plant Species

TREES

Delonix reginae (Poinciana)
Eucalyptus sp.
Eucalyptus caesia (Silver Princess)
Hymenosporum flavum (Native Frangipani)
Jacaranda mimmosifolia (Jacaranda)
Olea europea (olive sp.)
Ulmus parvifolia (Chinese Elm)

SHRUBS SUN

Abelia x grandifolia
Eremophila sp.
Grevillea sp.
Lavender Sp.
Lechenaultia sp.
Leptospermum x 'Burgundy Queen'
Meterosideros sp.
Olearia axillaris
Orthosanthus laxus
Patersonia occidentalis
Westringia fruiticosa (Coastal Rosemary)

SEMI SHADE

Brachycome multifida
Dianella sp.
Dietes sp.
Gaura lindheimeri (Gaura)
Hebe sp.
Ricinocarpus 'Bridal Star'
Salvia leucantha (Mexican Bush Sage)
Strelitzia reginae

GROUNDCOVERS/ CLIMBERS

Arctotis sp. (Daisy)
Dampiera sp.
Hardenbergia sp.
Hemiandra pungens
Hibbertia scandens (Snake Vine)
Kennedia nigricans
Lantana sp.
Pandorea pandorana (Wonga Vine)
Scaevola crassifolia
Trachelospermum jasminoides
Verbena sp.
Viola hederacea

HEDGES

Buxus heterophylla (English Box)
Callistemon 'Little John'
Rosmarinus 'Blue Lagoon' (Prostrate Rosemary)
Royena lucida (Royena)
Vibernum tinus

CENTRO VILLAGE
SITE DESIGN GUIDELINES

SUBIACO
REDEVELOPMENT
AUTHORITY

15 December 2005

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Foreword

Subi Centro has been developed to offer a stimulating urban environment to its residents within the Subiaco neighbourhood.

These design guidelines prescribe the standards and recommendations that will ensure that each residence of the Centro development will be a part of the community and that your property offers a valuable investment.

The development control provisions of this manual will be given full regard by the Authority in any development application. To depart from these provisions will require full and substantiated justification.

The provisions of this manual prevail to the extent of any inconsistency with the provisions of the Subiaco Redevelopment Planning Policies and the Subiaco Redevelopment Residential Design Manual.

1. HOUSING IN SUBI CENTRO

Being Neighbourly

Although not especially high, the general residential densities within Subi Centro are greater than standard suburban locations. This density is to take the form of smaller single residential lots, terrace housing and units. As density increases, being a good neighbour becomes all the more important, particularly with regard to the design of the building and its surrounds.

Building character, overshadowing, overlooking and landscaping are a few of the subjects to be covered by this manual, that when handled correctly in design and implementation terms, add immeasurably to the livability of the neighbourhood. After all, you are someone else's neighbour so if everyone does the right thing urban harmony should prevail.

Form and Character

The pattern, scale and type of residential development that are characteristic of other successful streets and precincts in Subiaco ensure the high standard of liveability in those neighbourhoods. Generally it is important that:

- Housing forms reflect the relatively intimate, village like character of Subiaco, with a similar mix of styles and densities;
- Residential buildings are orientated to the street whilst being designed in awareness of other issues of public/private spaces and interfaces and perceived and real security for users;
- The built form is designed as clusters with smaller urban forms to break down the scale and imply incremental growth;
- Housing types are able to be adapted in the future to serve the evolving needs of the community; and

- Residential development is energy efficient and sensitive to the need for water conservation.

It is strongly recommended that new landowners or their architect/designer approach the Town Planners at the Subiaco Redevelopment Authority with a concept plan at the earliest stage of design development to aid in expediting the planning approval process.

2. AREA COVERED BY GUIDELINES

These guidelines apply to all lots (333-339, 341-358, 364, 366, 367, 8003 & 8004) west of Centro Avenue within the Price Street Precinct, as shown in Figure 1 of these guidelines (attached).

3. SITE PLANNING

Generally lot sizes range from 223m^2 to 315m^2. Approximately half the lots range from 229m^2 to 293m^2 (terrace style) with the remainder of the lots ranging in size from 291m^2 to 315m^2.

Amalgamation of lots (to form larger development sites) or subdivision of single house lots will not be permitted.

Lot 8003 has been set aside for car parking and Lot 8004 has been set aside as public open space.

3.1 Setbacks and Heights

Buildings must be setback within the parameters as detailed in Table 1 - Site Design Guidelines.

It should be noted that in measuring front setbacks, where a maximum setback must be met, the front facade of the development must read as being reasonably substantial. For example, an open verandah is considered inadequate; a good portion of the building's front wall must meet the maximum setback requirements.

Side Setbacks

Side setbacks and permitted side openings shall generally be in accordance with the Residential Design Codes of Western Australia, although variations to these requirements may be supported provided the development:

- Complies with the manual's solar access requirements; and
- Does not impinge on the privacy of adjoining properties.

Developments on terrace lots are encouraged to build from side boundary to side boundary. For details of required setbacks see Table 1 - Site Design Guidelines.

Whilst development on Lot 367 is permitted to abut the southern side boundary, the upper level(s) of this elevation must be appropriately articulated (i.e. provided with

varied setbacks that add interest to this facade). A parapet wall is permitted for the entire length of the southern boundary on the ground level only.

Development on Lots 349 – 358 are required to be setback a minimum of 1 metre from the side boundaries on upper levels.

Development is permitted to the rear boundary excluding any services easements.

Building Height Limits

Building heights on lots within the subdivision vary according to the particular lot (see Table 1). Generally single housing is limited to 2 storeys or 9 metres, or 3 storeys or 12 metres for the terrace lots.

Building height is defined as finished site level to the highest point of roof. Variations to this height limit may be supported provided they are of a minor nature, such as chimneys and finials etc.

For details of building height limits see Table 1 - Site Design Guidelines.

3.2 Solar Access and Energy Efficiency

The house should be designed so that the most used daytime rooms are orientated to receive the maximum amount of northern winter sun whilst at the same time preserving solar access to adjoining properties. To this effect, no building should cause more than 50% of an adjoining lot to be in shadow at noon on June 21 or reduce sunlight to the principal area of ground level open space of adjacent residential properties to less than three hours between 9am and 3pm on June 21.

The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

3.3 Levels

Changing lot levels from those provided by more than 300mm will not be permitted. The dimensions and positions of all proposed retaining walls should be provided with your development application.

3.4 Vehicles and Garaging

The Redevelopment Scheme requires each house to provide at least one covered car bay on site although it is preferable that two be provided. These car bays must be accessed from the rear lane/mews where provided. Car parking for Lots 366 & 367 must be provided in a tandem (one behind the other) situation and accessed via a single width garage door or gate. The access leg for Lot 366 is to be located along the southern boundary of the site.

Vehicle access gates, garages or carports in Lots 342 - 353 must be setback 1 metre from the rear boundary with a 45 degree truncation from the structure to the boundary. Rooms above the garage may be cantilevered out to the boundary line. The floor level of the garage or carport must be within 200mm of the finished level of the laneway at the boundary.

4. BUILDING FORM

4.1 Appearance

It is intended that houses within the Centro Village subdivision will be representative of the 'New Style of Australian Housing' as has been built in nearby Subiaco Gardens. Houses should incorporate some of the design elements of housing typical of Subiaco and parts of Wembley. New dwellings must be two storeys, have similar volumes, proportions and details such as verandahs and fenestration patterns.

Your house must include elements such as pitched roofs (35-45 degrees), eaves, vertically oriented windows, verandahs, corrugated iron, stonework (limestone), red face brick, higher than standard floor to ceiling heights, verandahs and formal residential entries.

The house should enable "eyes on" the street, walkways, mews or public open space for passive surveillance from living rooms and balconies.

Development on Lot 367 must be designed to also address and provide casual surveillance over the adjoining car park and public open space. Whilst the ground floor can comprise a parapet wall on the southern boundary, any upper level must be articulated and appropriately detailed with a combination of elements such as major openings, awnings, balconies, varied colours and finishes. Two storey blank parapet walls will not be permitted. It is the applicant's responsibility to ensure that any such openings adjacent to this boundary comply with the requirements of the Building Code of Australia.

4.2 Plot Ratio and Site Coverage

The maximum plot ratio for all lots within the subdivision is 1:1.

Plot ratio is defined by:

> *"the ratio of the gross floor area of a building to the site on which the buildings is, or is to be, erected"*

For the purpose of plot ratio, Gross Floor Area is defined as:

> *"the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the outer face of the external enclosing walls, excluding lifts, stairs or stair landings, machinery rooms, air conditioning equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles, lobbies or amenities common to more than one dwelling or occupancy, or private open balconies."*

Additionally, livable areas within roof spaces will not be included in gross floor area calculations.

For details of maximum site coverage see Table 1 - Site Design Guidelines.

4.3 Roofscape

Roofs shall be pitched between 35-45 degrees where visible from public areas, streets and mews with a shallower pitch acceptable for verandahs and canopies, small areas of skillion and flat roofs behind parapets. All roofs should incorporate overhangs, eaves of at least 300mm and where appropriate, verandahs.

As the use of roof space is encouraged, appropriately proportioned dormer windows (as shown) and skylights can add interest to the external appearance of a roof and break up its volume. The use of gables fronting the street is required to add further interest to the streetscape and your house. Hip roofs are generally not permitted.

4.4 Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

These areas should be securely enclosed (fenced and gated), be clearly visible from the living area(s) of the dwelling to enable young children to play in a safe environment, be in one area not many smaller areas, and may be paved, grassed and include trees but not large planting beds. The area is not intended to be walled with a roof but may be covered with a pergola or weatherproof canopy. Depending on design, this space could be located on the first floor of a dwelling. The recommended minimum private outdoor areas for single dwelling lots (Lots 349 - 358) are:

- 30sq.m for a 2 bedroom dwelling;
- 40sq.m for a 3 bedroom dwelling;
- 50sq.m for a 4 bedroom dwelling; and

For terrace house lots (333- 348, 366 and 367) the private open space should be:

- 20sq.m for a 2 bedroom dwelling (or in the case of Lot 366 the minimum area should be 30sq.m);
- 30sq.m for a 3 bedroom dwelling;
- 40sq.m for a 4 bedroom dwelling.

All of these areas should have a minimum dimension of 4 metres, except in the case of Lot 366, which shall have a minimum dimension of 5 metres to ensure the protection of a jarrah tree that exists on that lot. See also Section 7.11.

A roof deck is permitted above the garage, provided it satisfies the privacy requirements of the Residential Design Codes.

4.5 Vehicle Access Gates, Carports and Garages

In some locations garages and carports may be required to be setback 1 metre from the rear boundary to enable adequate manoeuvring space into the site. Except for Lot 366, habitable rooms may be built into the space above garages and may overhang this setback, extending out to the lot boundary. No development other than a flat roof deck is permitted above the garage for Lot 366 to allow for the growth of the canopy of the existing Jarrah tree.

It is important that garages (particularly doors), carports and parking areas be detailed to reduce their visual impact and add interest at ground level. Generally the materials used in the garage should match that of the house.

Garage and carport details must be approved at the same time as the house even if it is intended not to construct them at the same time. The required storage area may be integrated within the carport.

Parking for Lots 366 and 367 must occur in a tandem (one behind the other) situation accessed via a single garage door or gate.

5. MATERIALS

5.1 Walls

It is a requirement that exterior walls of houses (facing the street or other public areas) utilise traditional red brick or rendering and incorporate the use of detailing to break up large areas to add interest and individuality. The use of limestone, carved or shaped wood, weatherboard, steelwork, painted brickwork and different colours also adds to the interest and texture of the dwelling. Contact the Authority's planners for colours and materials that are permitted within the precinct.

All exposed portions of any parapet wall must be finished to the same quality and standard as the facade of the dwelling. Where such wall is only visible from a neighbouring property the relevant adjoining neighbour will be consulted with regard to the colour of such wall. . The ground floor level of the southern elevation of the development on Lot 367 must be treated with an anti-graffiti coating and be kept free of graffiti at all times with such costs being borne by the owner.

5.2 Windows

Windows, particularly those that face the street, should generally have a vertical proportion. This design element adds to the objective of encouraging a vertical emphasis, which is an important factor when considering the size and width of the lots.

Detailing of the window frame itself and around the windows in the sills is encouraged. Whilst leadlight and patterned glass as a highlight is desirable, the use of tinted or reflective glass will not be permitted if able to be viewed from the street or public area. Remember, windows and glass doors facing the street can be whatever size is appropriate while windows on the side of your house will be required to be designed to take into account the issue of overlooking.

5.3 Roofs

Lighter coloured colorbond roofs (contact the Authority's planners for approved colours) are permitted as are traditional terracotta (marseille style) coloured tiles. Other coloured tiles are not permitted. Zincalume will not be permitted as the reflective qualities can impact upon neighbouring lots.

6. LANDSCAPING

6.1 Front Gardens

Front gardens add a great deal of character to the streetscape. As the lots are comparatively small, the front gardens and courtyards of most lots will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

6.2 Recommended Plant Species

Trees
Delonix regia (Poinciana)
Erythrina indica (Coral Bean)
Morus alba Var. pendula (Weeping Mulberry)
Sapium sebiferum (Chinese Tallow Tree)
Tipuana tipu (Pride of Bolivia)
Ulmus parvifolia (Chinese Elm)

Shrubs Sun
Abelia 'x' grandifolia
Agapanthus orientalis
Buxus sp.
Gardenia sp.
Hebe sp.
Plumbago sp.

Semi Shade
Azalia sp.
Camelia sp.
Dicksonia antartica
Fatsia japonica
Hydrangea sp.
Viburnum sp.

Ground Covers / Climbers
Bouganvillea
Hedera sp.
Hardenbergia sp.
Lantana sp.
Wisteria sinensis

Mandevilla sp.

Hedges
Buxus heterophylla (English Box)
Rosmarinus "Blue Lagoon" (Rosemary)
Royena
Plumbago auriculata

7. OTHER CONSIDERATIONS

7.1 Site Services

All site services (sewerage, water, power, gas and telephone) will be via the rear lanes and enter the property at a dedicated access easement approximately 1 metre by 1 metre in area (or 1 metre by 2 metres where they include a street light). These easements are located in a rear corner of the lot to minimise intrusion on your development area and have been identified on Figure 1. Development is permitted over these easements provided it is cantilevered with a minimum clearance of 2.4 metres above ground level. These easements cannot be covered or sealed by concrete or permanent materials, which would inhibit access to the services in the easement. Through consultation with the relevant Authorities the services may need to be lowered to enable better vehicle access to garaging. Where not required for access, the easement shall be appropriately landscaped.

7.2 Fencing

Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. However, as security is an issue it is recognised that the need for taller fences is legitimate. To achieve the same visual effect it is therefore important that your front fence be no higher than 1.2 metres and be at least 70% visually permeable.

Fencing of the front of your lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are permissible.

Letterboxes should be incorporated into the fence and clearly show your house number.

Side fences (within the front setback of the house) must be no higher than 1.2 metres and be constructed of the same or matching materials as those used in the front fence. Fibrous cement fencing ('Supersix') is not permitted.

For the remainder of the fencing on site, there are no constraints except that where possible they should complement the materials used in the house and be no more than 1.8 metres in height. Blank walls will not be permitted, with the exception of any fencing to a courtyard located on the southern boundary of Lot 367 which may have solid side fencing up to 2 metres in height.

7.3 Rubbish Bins

A separate storage area for large PVC wheeled bins should be catered for at site planning stage. An alcove pick-up area should be located towards the rear of the lot as garbage collection will be via the rear lanes.

7.4 Lighting

Front yard and house front lighting is encouraged for both security and aesthetic reasons but care should be taken to ensure it does not shine directly into neighbouring properties.

7.5 Air Conditioners

As air conditioners can often be noisy, it is important that they be located in areas that minimise the impact on your neighbours.

Roof mounted air conditioners are often unsightly and should be located at the rear of your roof where they cannot be viewed from the street, public areas or public open space and not easily from your neighbours property.

Air conditioning units, pool filtration equipment, motors, pumps and mechanisms shall be suitably located and enclosed if necessary to comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

Details of the type and proposed location of Air Conditioning units should be provided at the time of submitting working drawings.

7.6 TV Antennas, Satellite Dishes & Radio Masts

TV antennas are to be located within the roof space wherever reception permits. Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

7.7 Solar Collectors

Solar collectors must not be visible from the street or a public area. Should they be installed on the plane of the roof at the rear, ideally tanks are to be located within the roof space. If it is absolutely necessary to use a stand to change the angle of the collector then again it must not be visible from the street and not easily viewed from the neighbouring properties.

7.8 Clotheslines and Drying Areas

These should be located to maximise winter sunshine without being able to be seen from public areas.

7.9 Storage Area

Providing for outdoor storage space is important and most effectively done at the design stage. It is therefore a requirement that each house provide a secure storage area of at least 4 square metres which is fully integrated into the dwelling or garage.

7.10 Stormwater

All stormwater must be contained on site. Storm water retention must be indicated on the plans submitted at working drawing stage. No stormwater soak wells or other infrastructure is permitted under the canopy of the existing tree on Lot 366.

7.11 Protection of Tree on Lot 366

Lot 366 contains an existing Jarrah tree, which is legally protected by a memorial on the title. In order for the tree to remain in good health no development is to occur under the tree canopy and the tree shall form the centre of the private outdoor courtyard area of any dwelling to occupy the lot. The dimensions of the private outdoor courtyard area shall be no less than 5 metres. These dimensions may be increased at the discretion of the SRA where the SRA feels it is necessary to ensure the protection of this tree.

As the tree is to form the centre of the private open space for Lot 366, a raised deck of minimum height is to be constructed in the area within the drip line/root zone of the tree, to allow for oxygenation of the soil and to prevent compaction whilst providing an area for active recreation by future occupants.

The owner is to install bollards or a fencing barricade, which preclude vehicles from driving under the main canopy of the tree. This barricade must be installed prior to occupation of the dwelling. In the area under the tree canopy, excluding any portion of the permitted single width driveway, which must abut the southern boundary, the following management practices are to be implemented:

- During construction temporary fencing is to be installed to preclude the parking of vehicles, as well as the storage or dumping of any material under the canopy of the tree. This fence is to be installed prior to the commencement of works and is to be retained in good condition for the duration of the works;
- No heavy watering of the tree;
- No fertilizing of the tree;
- No excavation within the drip line/root zone of the tree;
- No trenching within the drip line/root zone of the tree;
- No mechanical damage / compaction within the drip line/ root zone;
- Light, leafy mulch is to be placed within the drip line/root zone of the tree. This mulch is required to be purchased only from accredited nursery suppliers;
- No paving beneath within drip line/ root zone of the tree; and
- Any planting is to be restricted to compatible native plants at light spacings.

No heavy pruning of this tree shall occur without prior approval of the City of Subiaco.

7.12 Protection Against Structural Damage by the Tree on Lot 366

To protect the structural integrity of buildings constructed on Lot 366, it is strongly recommended that:

- all walls include a root barrier to protect structures from root development of the tree; and
- the carport/garage on Lot 366 be constructed with large capacity guttering and downpipes to prevent blockage by plant debris.

APPROVALS

8.1 All Development

The Subiaco Redevelopment Act states that the carrying out of any development within or partly within the Redevelopment Area requires the approval of the Authority.

Development is defined as:

> *"(a) the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land;*
> *(b) a material change in the use of land; and*
> *(c) any other act or activity in relation to land declared by regulation to constitute development, but does not include any work, act or activity declared by regulation not to constitute development (eg. maintenance work on government utilities)."*

Separate approval from the City of Subiaco is not required although your development application will be referred to the Council's of Subiaco and Cambridge for their comment prior to the Authority making a decision.

The usual local government Building and Health By-Laws remain in force and Licences must still be obtained, whenever necessary, directly from the City of Subiaco.

8.2 The Application

An application for approval to commence development is required to be made by completing Form 1 (available from the SRA and Subiaco Council) and should be accompanied by such plans and other information as the Authority may reasonably require.

Generally the Authority will require the following information to be provided with an application for approval to commence development:

- six (6) copies of a plan(s) to a scale of at least 1:500 showing:

(i) the location and proposed use of any existing buildings and out buildings to be retained and the location and use of buildings proposed to be erected or demolished on the land;

(ii) the existing and the proposed means of access for pedestrians and vehicles to and from the land;

(iii) the location, number, dimension and layout of all car parking spaces intended to be provided;

(iv) the location, dimensions, design and particulars of the manner in which it is proposed to develop any landscaped area, including the retention of existing trees and other vegetation, fences and walls; and

(v) the location of the existing mature jarrah tree and any proposed trenching in the case of Lot 366;

- plans, elevations and sections of any building proposed to be erected or altered and of any building it is intended to retain, including details of materials of construction, finishes and external colours;
- a statement of, or plans indicating the impact of the proposed development on the streetscape, views, privacy and overshadowing;
- a statement setting out details of the intended use and the way in which that use is proposed to operate;
- details of all signs and advertising structures; and
- any other plan or information required to be provided pursuant to the Redevelopment Scheme or which the Authority may require to enable the application to be determined.

A fee is required to be paid for any development application relating to land within the Scheme Area. The fee is scaled according to the value of the proposed development. A schedule of fees can be obtained by contacting the Authority's Planners.

The Authority aims to determine all applications within 60 days of lodgement of which 42 days are allocated for consultation with the City of Subiaco and Town of Cambridge.

TABLE 1: SITE DESIGN GUIDELINES

Lot No.	Lot size (m^2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m)	Height (m)	Max. site coverage (%)	Side Fence treatment
333	254	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	✓
334	254	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	
335	254	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
336	254	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
337	254	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
338	254	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
339	254	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
341	223	1	0 – 2	Nil	Nil	12m or 3 storeys	80%	
342	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	✓
343	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
344	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
345	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
346	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
347	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	
348	229	1	0 – 2	Nil	Nil	9m or 2 storeys	80%	✓
349	315	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	✓
350	310	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	

Lot No.	Lot size (m^2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m)	Height (m)	Max. site coverage (%)	Side Fence treatment
351	310	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	
352	310	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	
353	315	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	✓
354	293	1	2 – 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	✓
355	291	1	2 - 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	
356	292	1	2 - 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	
357	293	1	2 - 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	
358	297	1	2 - 4	Nil & 1m on upper levels	Nil	9m or 2 storeys	70%	✓
364	250	1	0 - 2	Nil	Nil	12m or 3 storeys	80%	✓
366	293	1	0 - 2	Nil	Nil*	12m or 3 storeys	80%	
367	215	1	0 - 2	Nil & Upper Level(s) on Southern Boundary to be articulated	Nil	12m or 3 storeys	80%	

* Refer to Section 4.4 "Private Open Space" and Section 7.11 "Protection of Tree on Lot 366" for special conditions concerning the retention of a jarrah tree that influences side and rear setbacks for this lot.

centro avenue

site design guidelines

september 1998

(Lots 309, 325, 326, 328-331)

SUBI CENTRO
a place for all

Perth's newest and most exciting business address

Context

Refer to the SRA Scheme Text for Statement of Intent, Preferred Land Uses and Plot Ratios and the SRA's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to lots 309, 325, 326, 328 - 331, Centro Avenue as shown on Figure 1 - Centro Avenue Subdivision.

Relationship to Planning Scheme and General Planning Policies

The 'preferred' and 'potential' land uses for the Centro Avenue (Centro Place) commercial area are detailed within clause 42 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

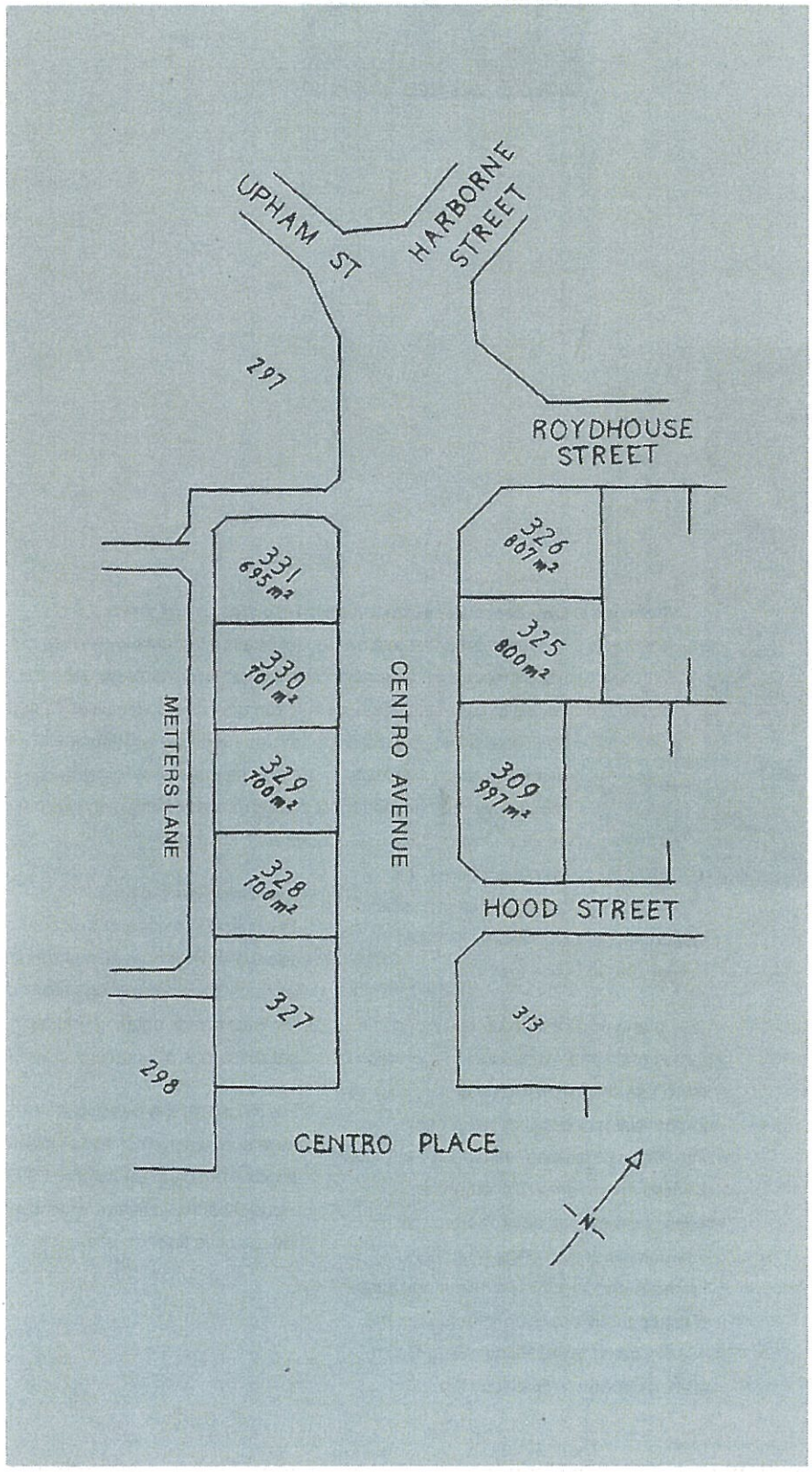
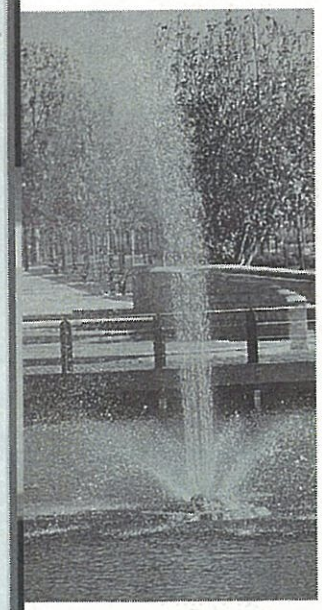


Figure 1 - Centro Avenue Subdivision

desired character



Desired Character

The intent is to create a vibrant mixed use area having the qualities of a traditional urban commercial precinct. Centro Avenue is the primary northern access into the Centro Place commercial area. It is intended that the scale of development would gradually increase towards Centro Place itself.

Uses that would be appropriate along this portion of Centro Avenue include, offices mixed use showroom/commercial buildings, commercial/residential developments, entertainment facilities, restaurants and even serviced apartments. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscape that extends from Centro Place, along Centro Avenue through to Subiaco Common.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Examples of integral artworks include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows.

For these lots the building envelope shall have a minimum facade height of 7.2m and a maximum (facade) height of 9.2m (see Figure 2) or two storeys whichever is the lower above finished site level

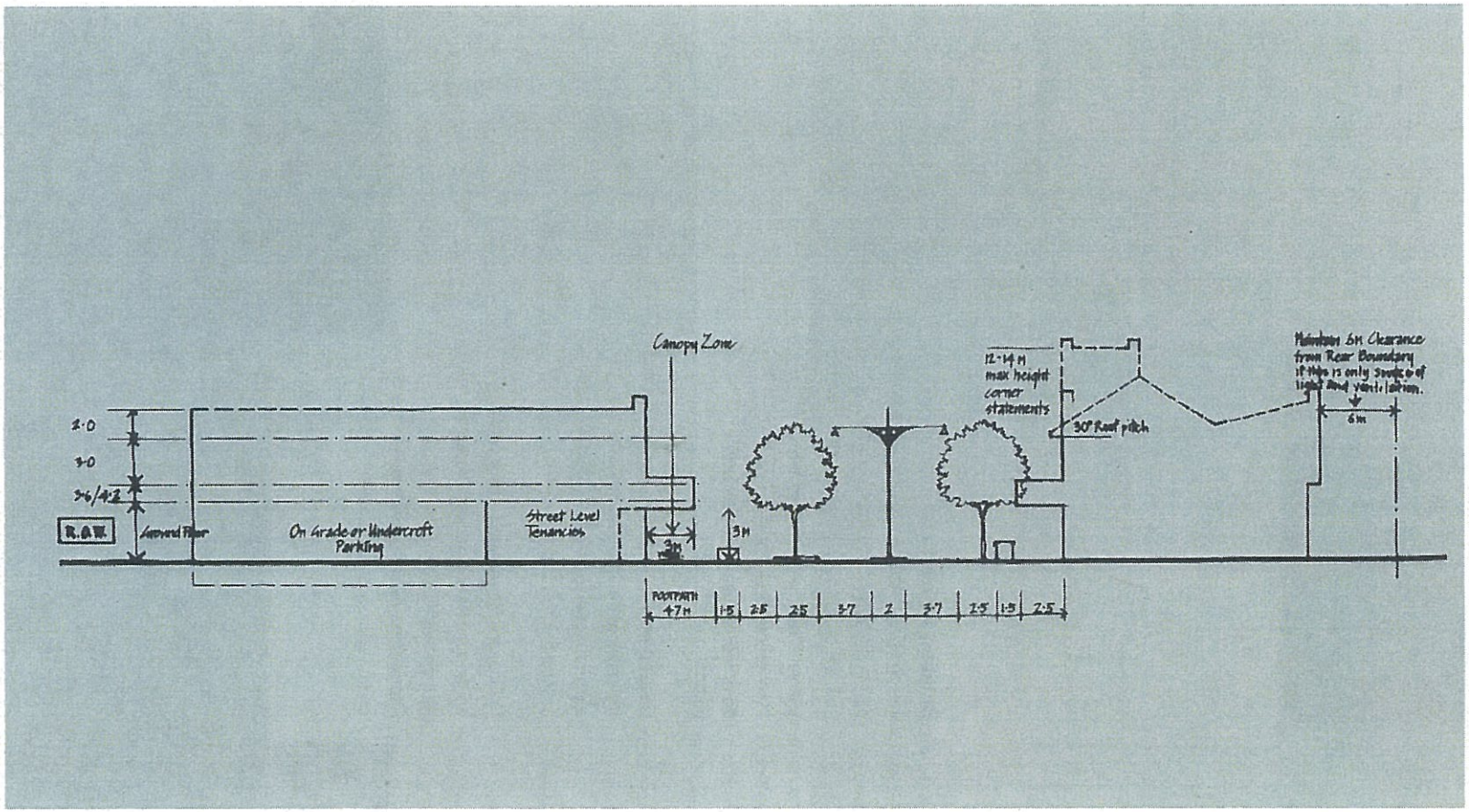


Figure 2 - Building Envelope

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements (except on lot 326).

Development on lot 326 must be setback a minimum of 6m from the rear boundary to accommodate a 6m wide (vehicular) access easement to lot 325.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. This may be approached by using atriums, courtyards and/or appropriate setbacks.

Setbacks

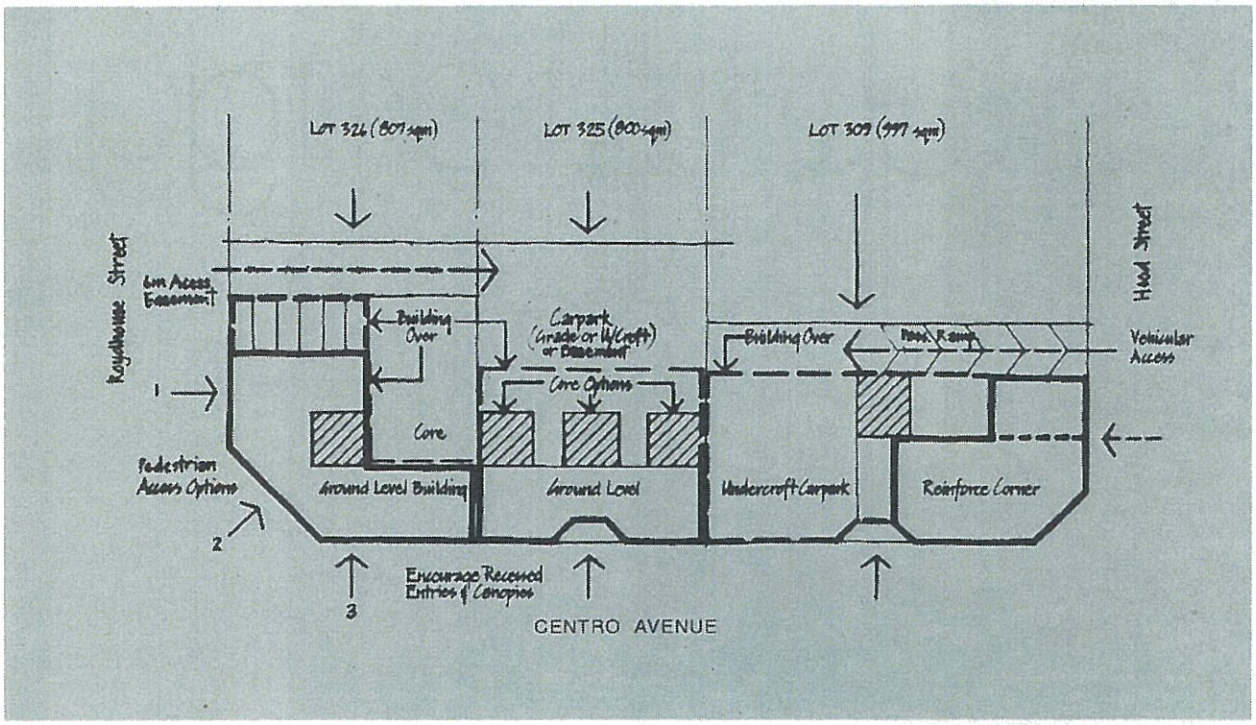


Figure 3 - Lots 309, 325 & 326 -
Site Development Options

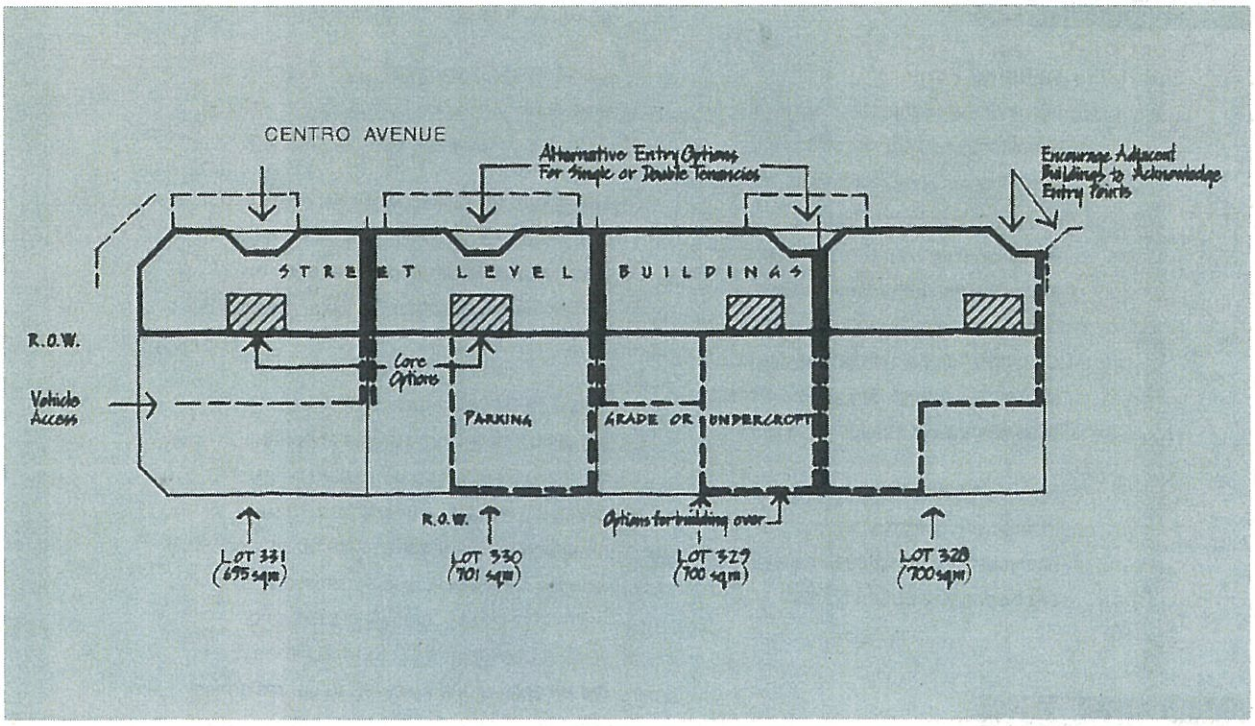


Figure 4 - Lots 328 to 331 -
Site Development Options

building form

Building Form

It is anticipated that the majority of development will be for offices and showroom/commercial floorspace. Individual buildings may have a number of different tenant spaces which may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's facade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting.

Development at the street level must incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards.

Lots 326 and 309 must address and reinforce the corners through the use of parapets, fenestration, entries or roof design.

Generally buildings must have a vertical emphasis, reinforced by vertically orientated windows, facade and parapet detailing.

Lengths of featureless walls will not be permitted where they are visible from the public realm. Minimal recesses in tilt-up panels is not considered to be an acceptable design solution.

Lots 328-331 also back onto future residential development. It is important therefore that due consideration be given to the design of this rear elevation. It is a requirement that service areas be properly screened, overlooking is minimised and building plant (air conditioning etc) and lighting be locatedd so as to not impact on the amenity of the adjoining future residential development.

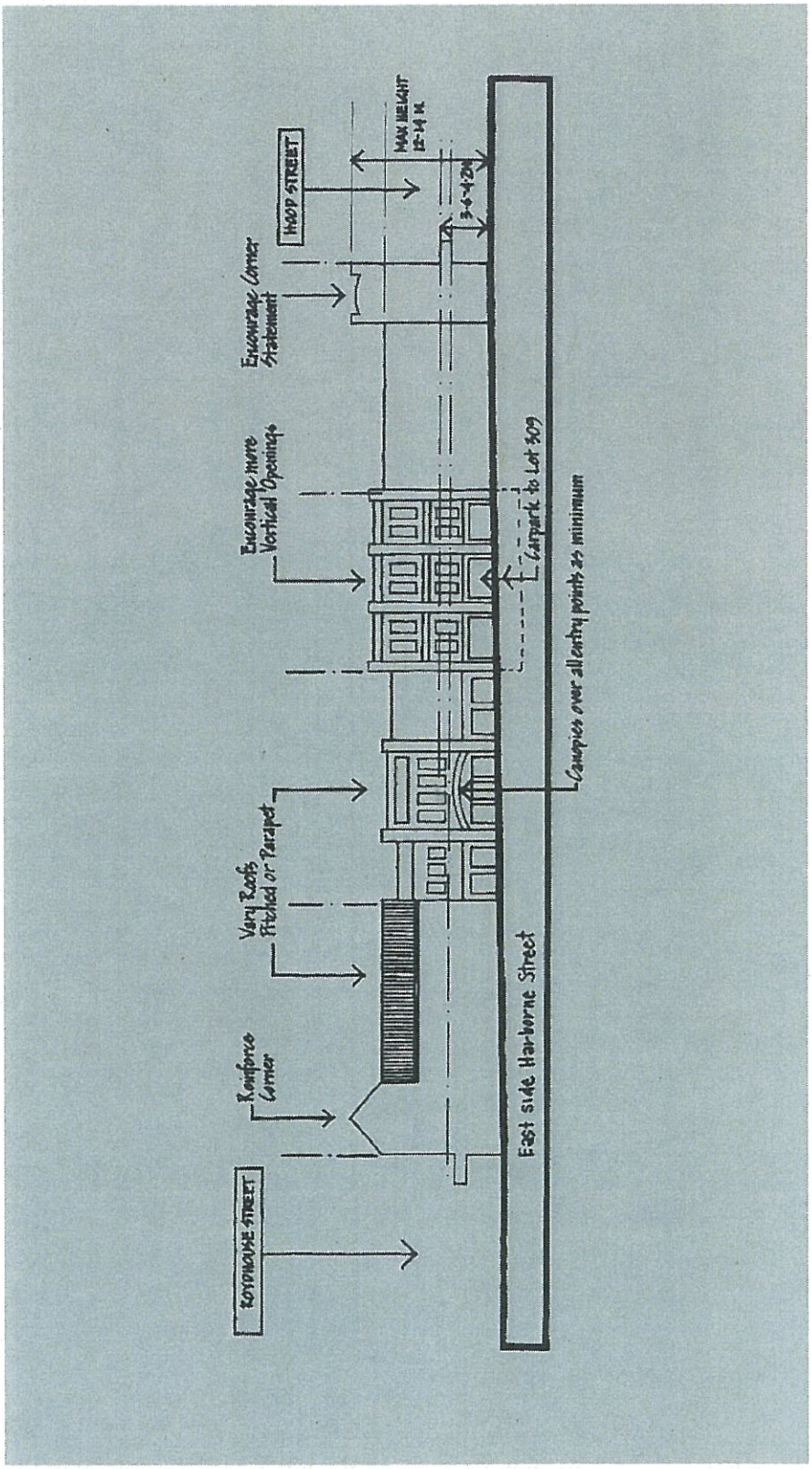


Figure 5 - East Side of Centro Avenue -
Desired Built Form

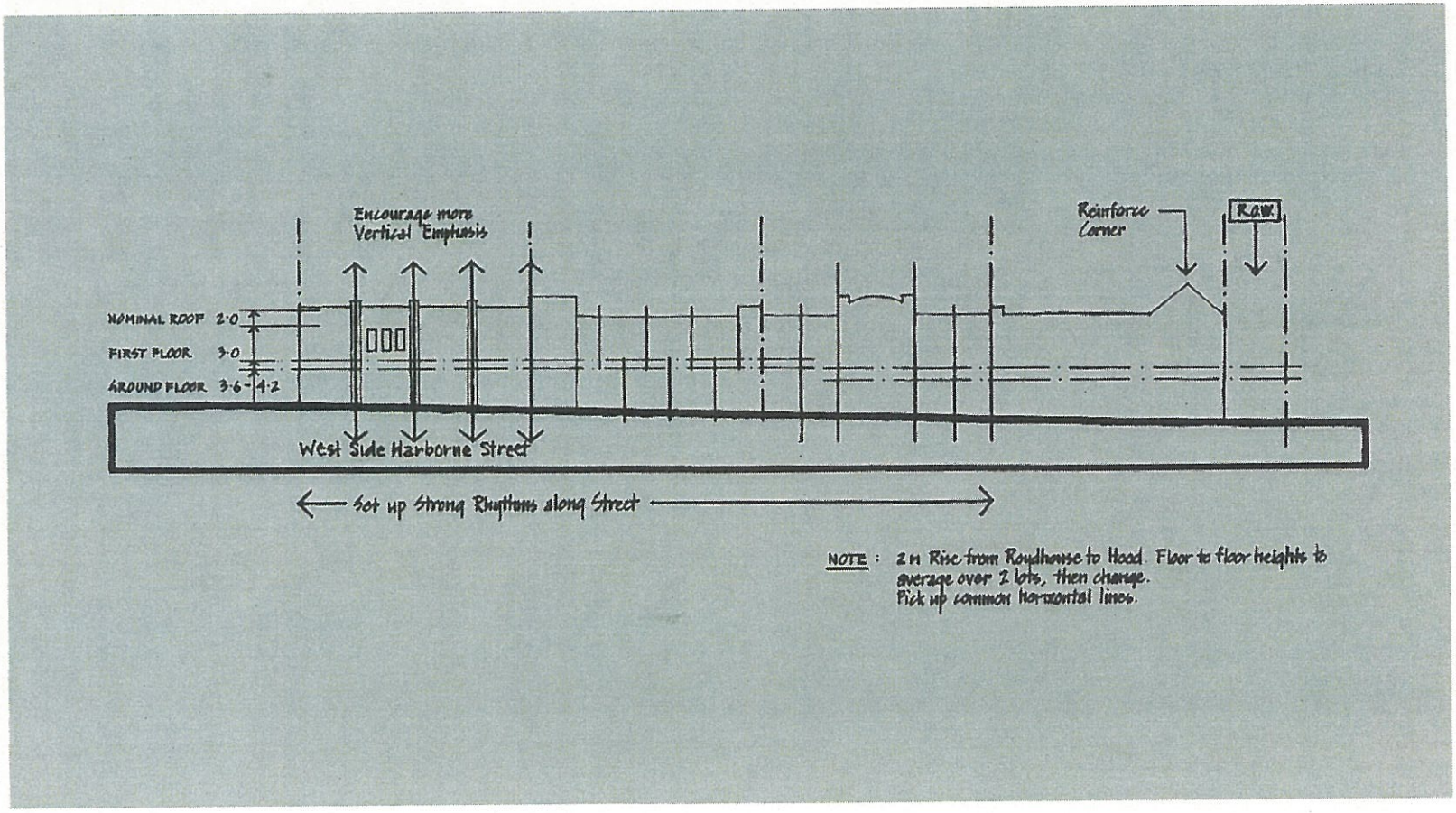


Figure 6 - West Side of Centro Avenue - Desired Built Form

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading.

Roofs must have a minimum pitch of 30° and be constructed of clay or slate tiles or colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials or other roof plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

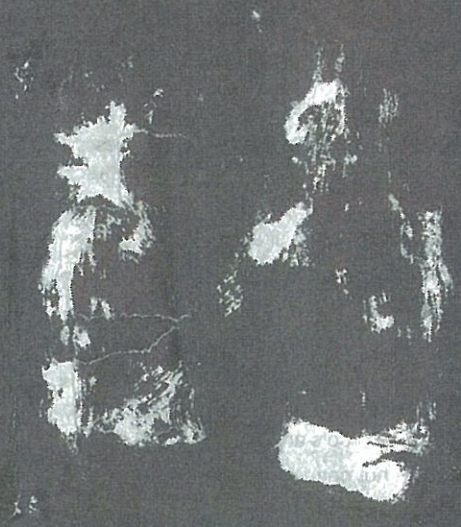
All car parking shall be in conformance with the standards as set within the Redevelopment Scheme.

For lots 328-331 car parking areas must be accessed via Metters Lane. Car parking on lot 326 must be accessed via Roydhouse Street Access to lot 325 is via a 6m wide access easement located at the rear of lot 326. Access to car parking on Lot 309 must be via Hood Street.

Services

Development on lots 328-331 have access to all urban services which are located at the rear of the lot via the laneway. Service to lots 309, 325 and 326 will be via their Centro Avenue frontages.

All piped and wired services, air conditioners, hot water storage etc should be not be visible from the public realm.



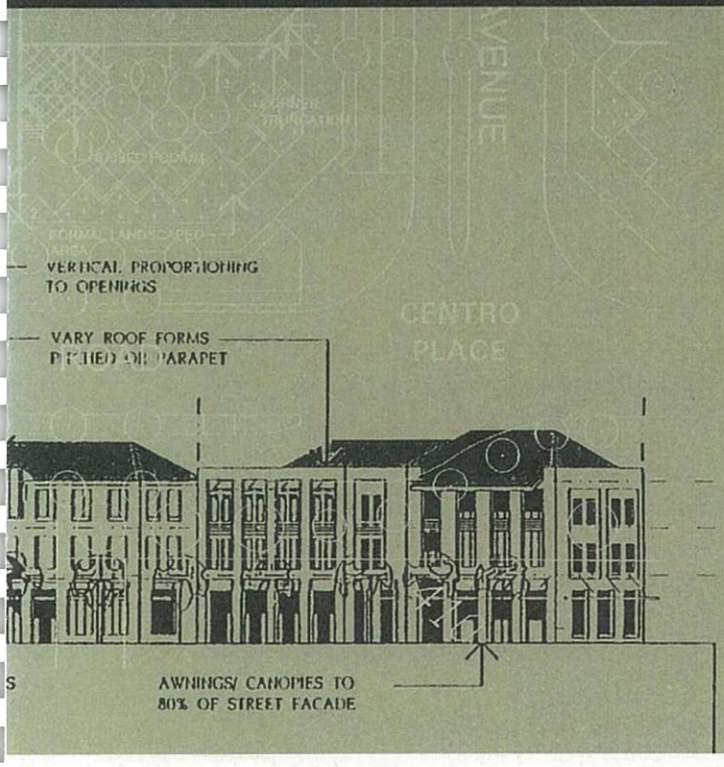
Further information on any aspect of these guidelines can be obtained by contacting the Authority's Town Planners on 9388 3449.

SUBIACO REDEVELOPMENT AUTHORITY
17 Hood Street
Subiaco WA 6008

Telephone 9388 3449
Facsimile 9388 3412
sra@opera.iinet.net.au

GOVERNMENT OF WESTERN AUSTRALIA
Ministry for Planning

centro place precinct



stage 2
design guidelines

SUBI CENTRO
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stage 2 design guidelines

Context
Refer to the SRA Scheme Text Statement of Intent, Preferred Land Uses and Plot Ratios and the SRA's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines
These Site Design Guidelines apply to lots 327 and 415 Centro Avenue and lots 413,414,416,417,424 & 425 Roberts Road as shown on Figure 1 - Centro Place Subdivision.

Relationship to Planning Scheme and General Planning Policies
The 'preferred' and 'potential' land uses for the Centro Avenue and Centro Place Commercial Area are detailed within clause 42 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

Desired Character
The intent is to create a vibrant mixed-use area having the qualities of a traditional urban commercial precinct. Centro Avenue is the primary northern access into the Centro Place commercial area. It is intended that the scale of development would gradually increase towards Centro Place itself.

Uses that would be appropriate within the Centro Place Precinct include: offices, mixed-use showroom/commercial buildings, commercial/residential developments, entertainment facilities, restaurants and serviced apartments. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscape that extends from Subiaco Square along Roberts Road and Centro Avenue through to Subiaco Common.

Integration of Art
Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope
The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows.

Lots 327 and 415 are perceived to be prominent corner sites at the entry to Centro Place. For these lots the building envelope shall have a minimum of three storeys with a maximum of four storeys. The maximum permitted eaves/ parapet height above finished site level is 14.0m with a maximum height of the corner statement adjacent to Centro Place being 16.0m.

Lots 413, 414, 416, 417, 424 and 425 have a minimum building envelope requirement of two storeys with a maximum of three storeys. For these lots the maximum permitted eaves/ parapet height above finished site level is 11.7m with a maximum height of the corner statement adjacent to Roberts Road being 13.7m for lots 413 and 414.

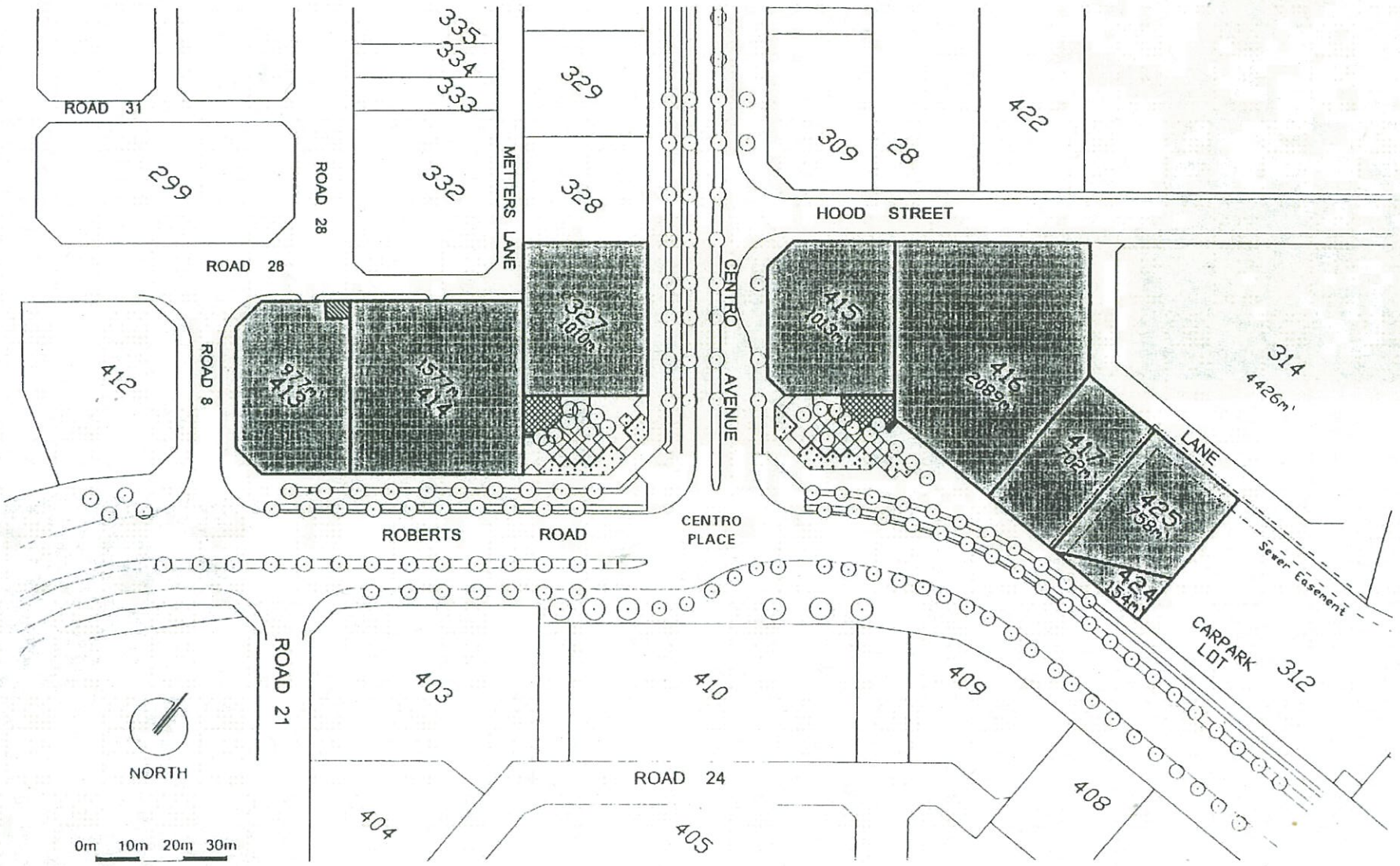
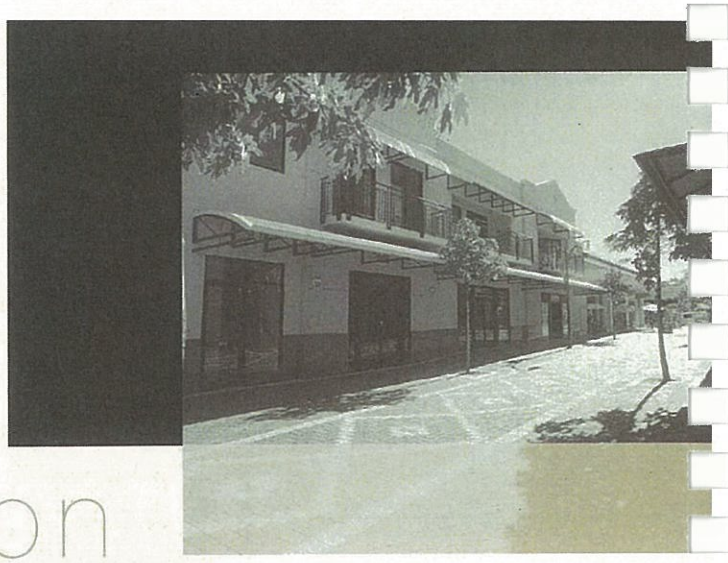

ROAD 31
299
ROAD 28
ROAD 28
335
334
333
332
METTERS LANE
329
328
327
1010m²
309
28
422
HOOD STREET
CENTRO AVENUE
415
1013m²
416
2089m²
417
702m²
425
758m²
424
154m²
314
4426m²
LANE
Sewer Easement
CARPARK LOT
312
412
ROAD 8
413
414
ROBERTS ROAD
CENTRO PLACE
ROAD 21
403
410
409
408
ROAD 24
404
405
NORTH
0m 10m 20m 30m

FIGURE 1



integration

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements. Development on lot 327 must be setback from the street corner boundary to a minimum truncation of 5.66 metres in order to match lot 415 and to formally address and reinforce the corner to Centro Place. Similarly, development on lot 414 must be setback from the street corner boundary to a minimum truncation of 8.5 metres to match that of lot 413.

Lot 424 and 425 are to be sold together (as one parcel and will be seen as one parcel when calculating plot ratio for the site), however lot 424 is affected by the railway tunnel running under Roberts Road. No development is permitted directly above the tunnel or within the tunnel easement. Development on the remaining portion of lot 424 is not precluded, however all structures should be independent of the tunnel and it's 'zone of influence'. Should the developer wish to build within the 'zone of influence' then the requirements of Appendix I apply with respect to load limits.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. This may be approached by using atriums, courtyards and/or appropriate setbacks.

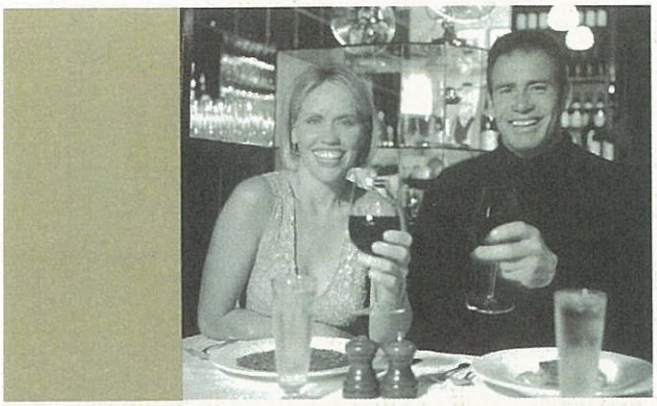
Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential.

Building Form

It is anticipated that the majority of development will be for offices and showroom/commercial floorspace. Individual buildings may have a number of different tenant spaces which may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's façade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting. Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum awning height of 4.5 metres is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards. Lots 327, 413, 414 and 415 must address and reinforce the corners through the use of parapets, fenestration, entries or roof design. Buildings must have a vertical emphasis, reinforced by vertically orientated windows, façades and parapet detailing. Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.



Several of the subject lots back onto future residential development. It is important therefore that due consideration be given to the design of this rear elevation. It is a requirement that service areas are properly screened, overlooking is minimised and building plant (air conditioning etc) and lighting are located so as to not impact on the amenity of the adjoining future residential development.

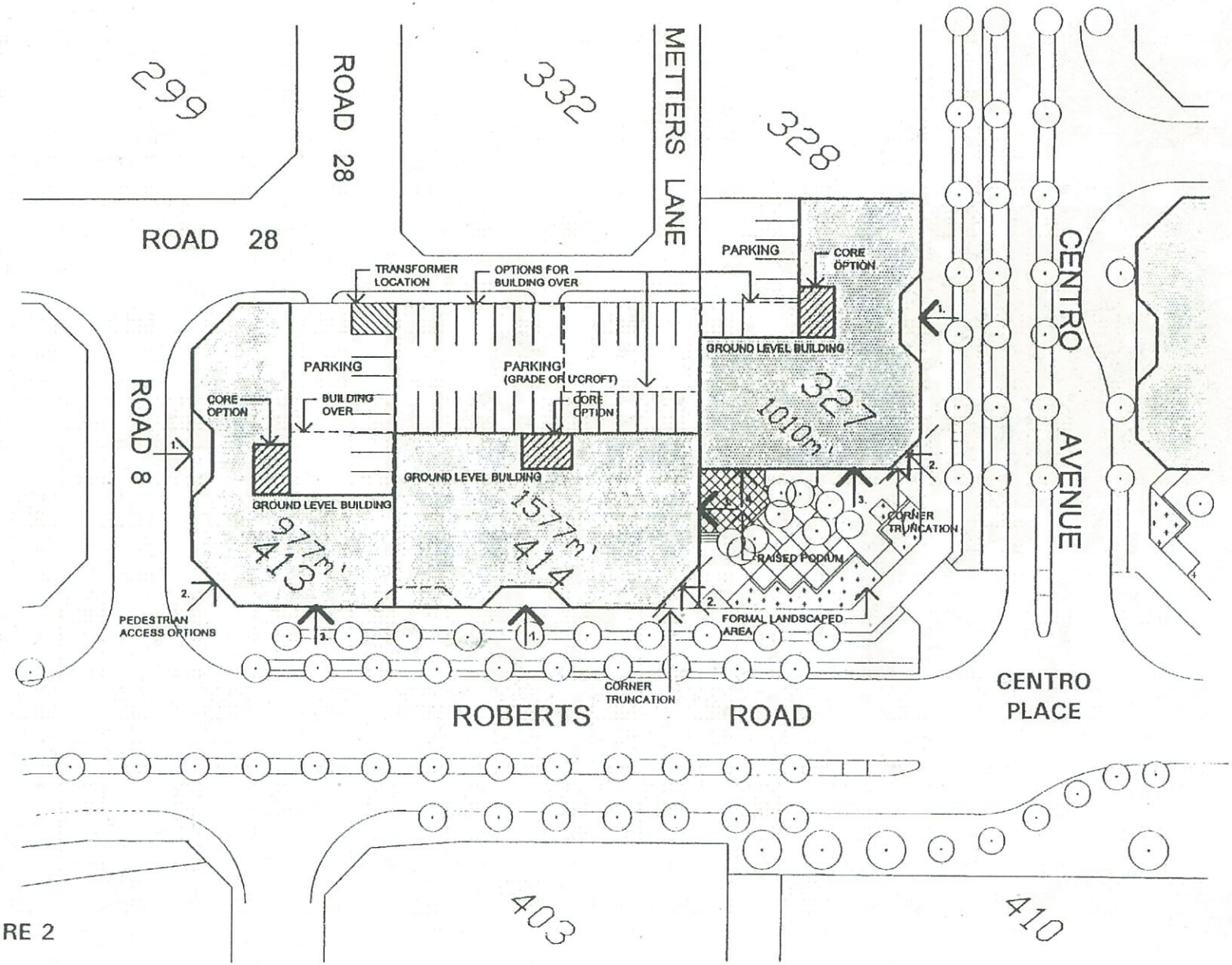


FIGURE 2

LEGEND:

PEDESTRIAN ACCESS OPTIONS

REQUIRED PEDESTRIAN

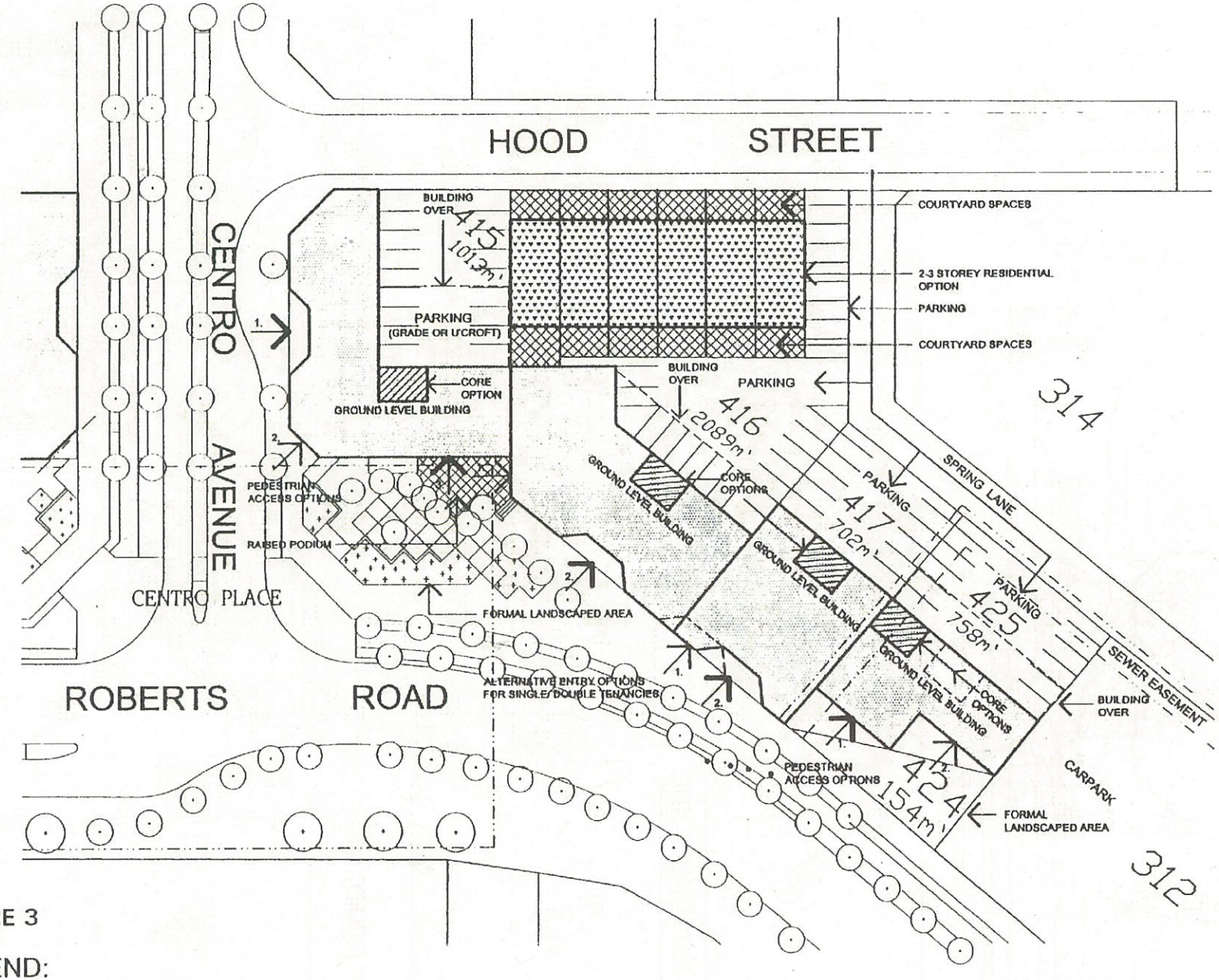


FIGURE 3

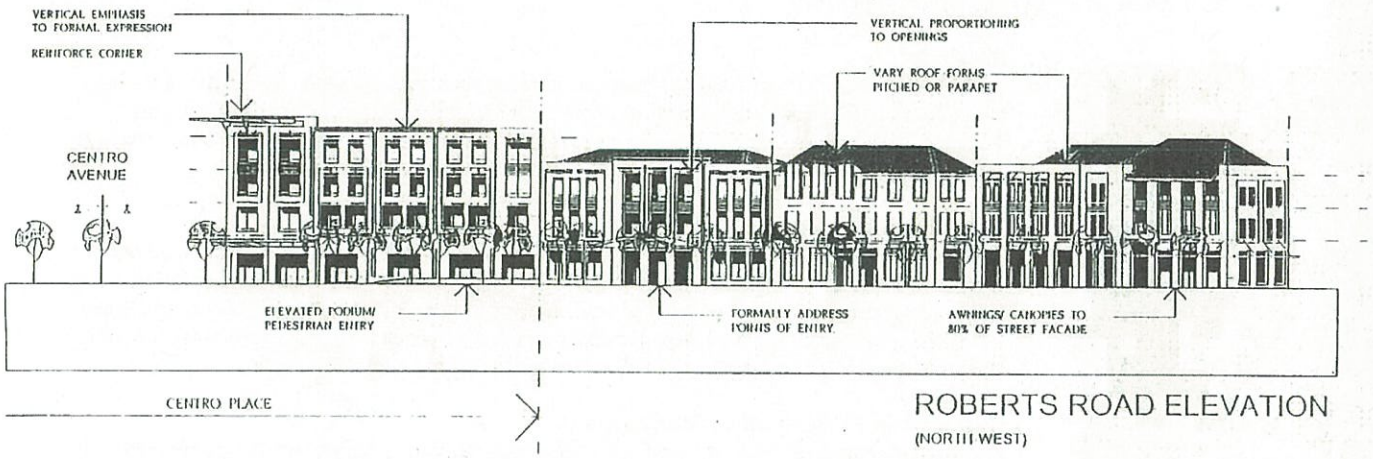
LEGEND:

PEDESTRIAN ACCESS OPTIONS

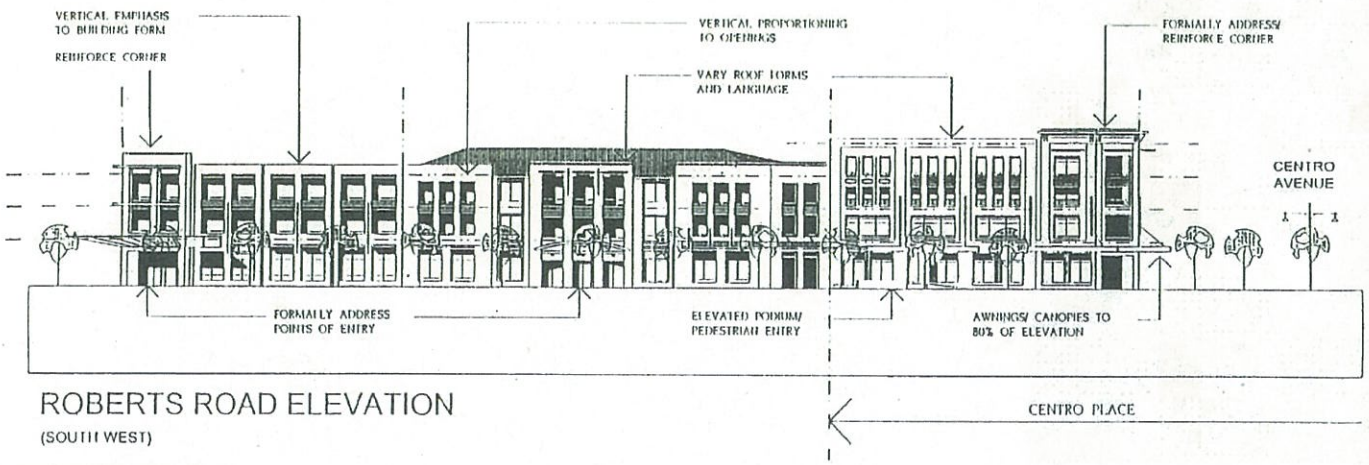
REQUIRED PEDESTRIAN ACCESS POINT

figure 4 - centro place precinct

figure 5 - centro place precinct



ROBERTS ROAD ELEVATION
(NORTH WEST)



ROBERTS ROAD ELEVATION
(SOUTH WEST)

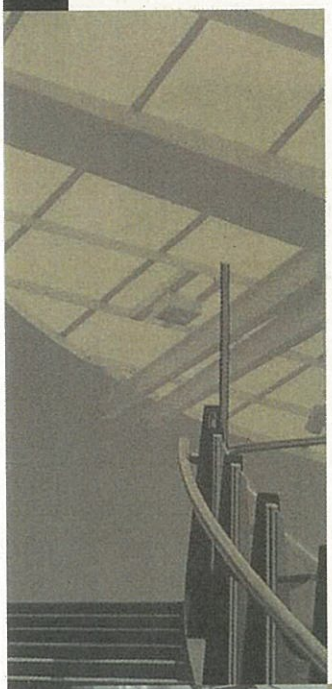
Colours and Materials

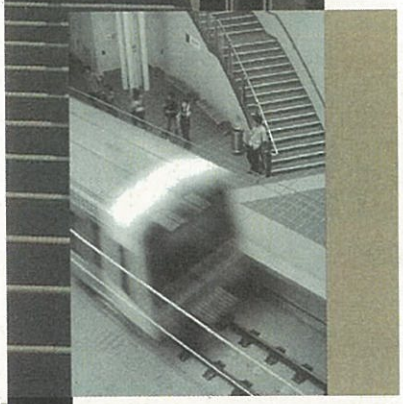
Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details. Windows must have a vertical orientation and ideally be recessed within the façade. Dark tinted or reflective glass is not permitted. Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading. Roofs must have a minimum pitch of 30(and be constructed of clay or slate tiles or colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval. Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall be in conformance with the standards as set within the Redevelopment Scheme. Car parking on lot 415 must be accessed via Hood Street. For lots 416, 417 and 425 car parking areas must be accessed off Hood Street via a 6m wide lane located along the southern and south western boundaries within the adjacent lot 314. Access to car parking on lots 413, 414 and 327 must be via either "Road 28" or Metters Lane.





Services

Development on lots 327, 413 and 414 have access to all urban services, which are located at the rear of the lot via either the laneway or Road 28. Services to lot 415 and 416 will be via Hood Street. Lots 417and 425 have access to all services via their Roberts Road frontages. All piped and wired services, air conditioners, hot water storage etc should not be visible from the public realm.

Railway Tunnel Zone of Influence

Development on lots located adjacent to the rail tunnel (ie Lot 424 only) which results in any load being applied within the zone of influence will be required to comply with the relevant specifications that pertain to the allowable loads on or near the tunnel from buildings founded in the 'Zone of Influence' (see Figure 10). These specifications are summarised in Appendix I. A statement from a structural engineer confirming that these specifications have been met will be required at Building Application stage.

Buffer Area Performance Standards

Lots located within 50m of the rail tunnel (see Figure 9) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendix II. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant, expert in the assessment of vibration and ground borne noise, confirming that the various standards have been met will be required to be lodged at Building Application stage.

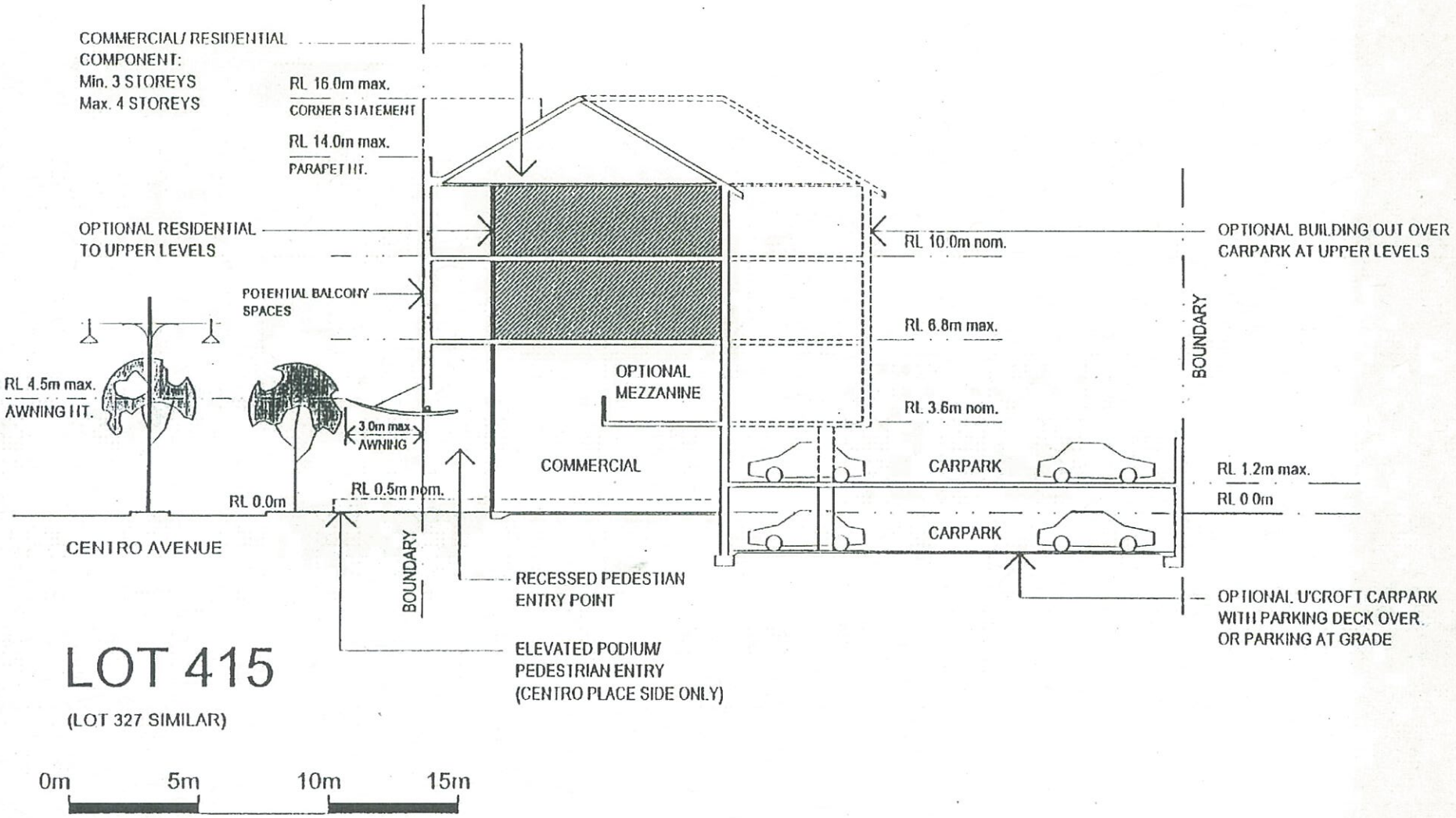

COMMERCIAL/ RESIDENTIAL COMPONENT:
Min. 3 STOREYS
Max. 4 STOREYS
RL 16.0m max.
CORNER STATEMENT
RL 14.0m max.
PARAPET HT.
OPTIONAL RESIDENTIAL TO UPPER LEVELS
POTENTIAL BALCONY SPACES
RL 4.5m max.
AWNING HT.
3.0m max AWNING
OPTIONAL MEZZANINE
COMMERCIAL
RL 0.0m
RL 0.5m nom.
CENTRO AVENUE
BOUNDARY
RECESSED PEDESTIAN ENTRY POINT
ELEVATED PODIUM/ PEDESTRIAN ENTRY (CENTRO PLACE SIDE ONLY)
RL 10.0m nom.
OPTIONAL BUILDING OUT OVER CARPARK AT UPPER LEVELS
RL 6.8m max.
RL 3.6m nom.
CARPARK
CARPARK
BOUNDARY
RL 1.2m max.
RL 0.0m
OPTIONAL U'CROFT CARPARK WITH PARKING DECK OVER. OR PARKING AT GRADE
LOT 415
(LOT 327 SIMILAR)
0m
5m
10m
15m

FIGURE 6

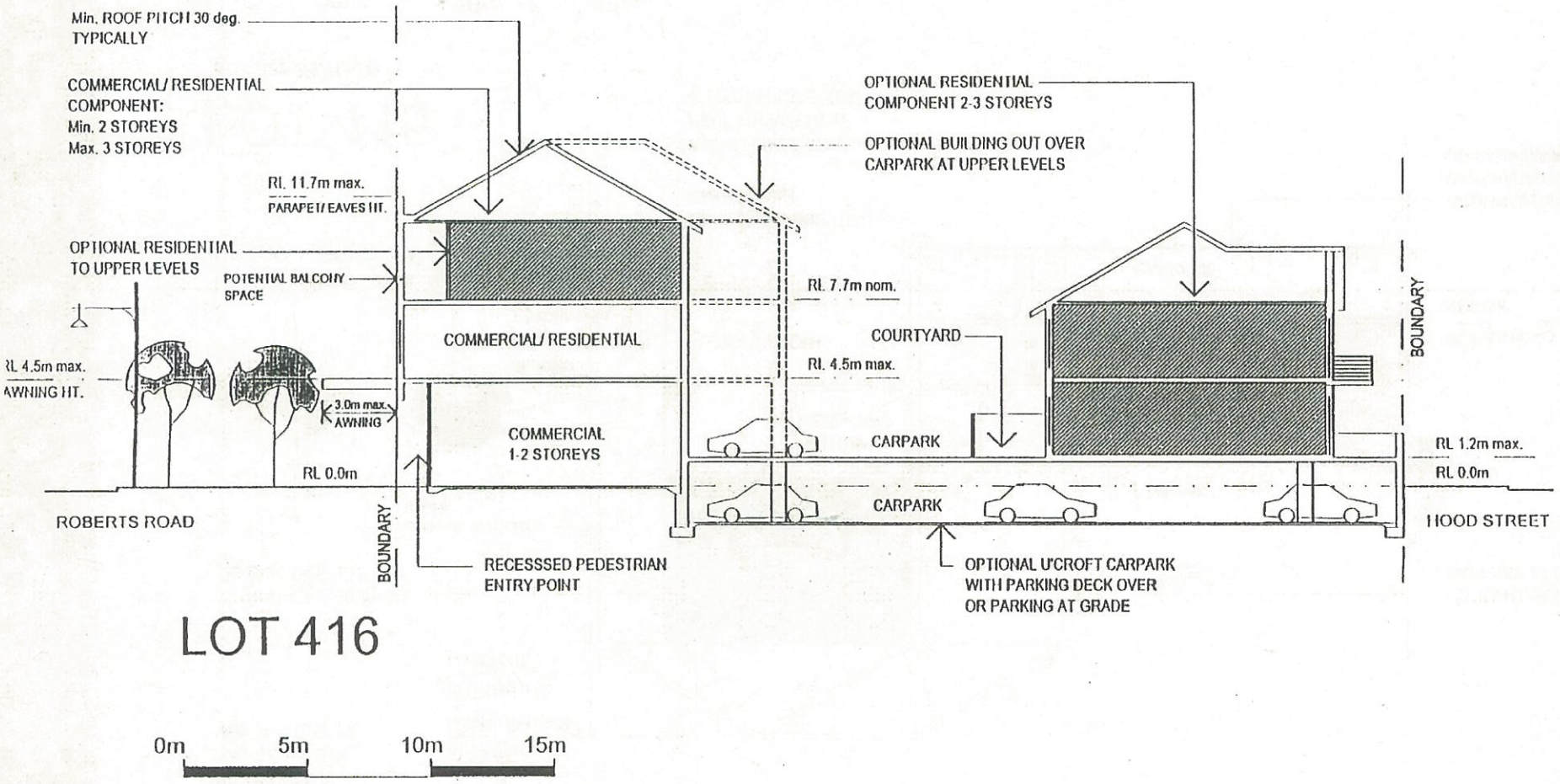
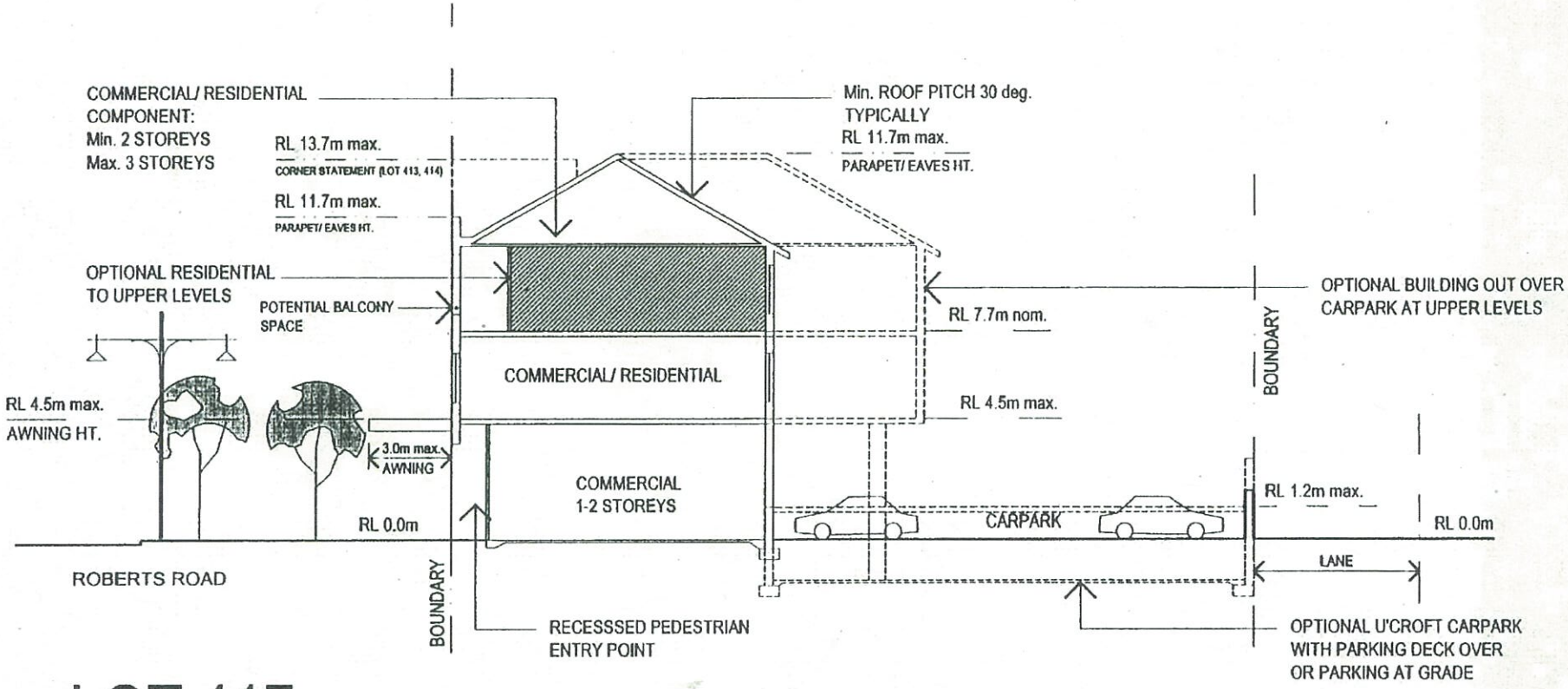

Min. ROOF PITCH 30 deg. TYPICALLY
COMMERCIAL/ RESIDENTIAL COMPONENT:
Min. 2 STOREYS
Max. 3 STOREYS
RL 11.7m max.
PARAPET/ EAVES HT.
OPTIONAL RESIDENTIAL TO UPPER LEVELS
POTENTIAL BALCONY SPACE
RL 4.5m max.
AWNING HT.
3.0m max. AWNING
RL 0.0m
ROBERTS ROAD
BOUNDARY
COMMERCIAL/ RESIDENTIAL
COMMERCIAL 1-2 STOREYS
RECESSSED PEDESTRIAN ENTRY POINT
OPTIONAL RESIDENTIAL COMPONENT 2-3 STOREYS
OPTIONAL BUILDING OUT OVER CARPARK AT UPPER LEVELS
RL 7.7m nom.
RL 4.5m max.
COURTYARD
CARPARK
CARPARK
OPTIONAL U'CROFT CARPARK WITH PARKING DECK OVER OR PARKING AT GRADE
BOUNDARY
RL 1.2m max.
RL 0.0m
HOOD STREET
LOT 416
0m
5m
10m
15m

FIGURE 7



LOT 417

(LOT 425 SIMILAR)

(LOTS 413, 414 SIMILAR MODEL
WITH PARKING OFF ROADWAY)

0m 5m 15m

FIGURE 8

AREA AFFECTED BY NOISE AND VIBRATION MANAGEMENT CONDITIONS

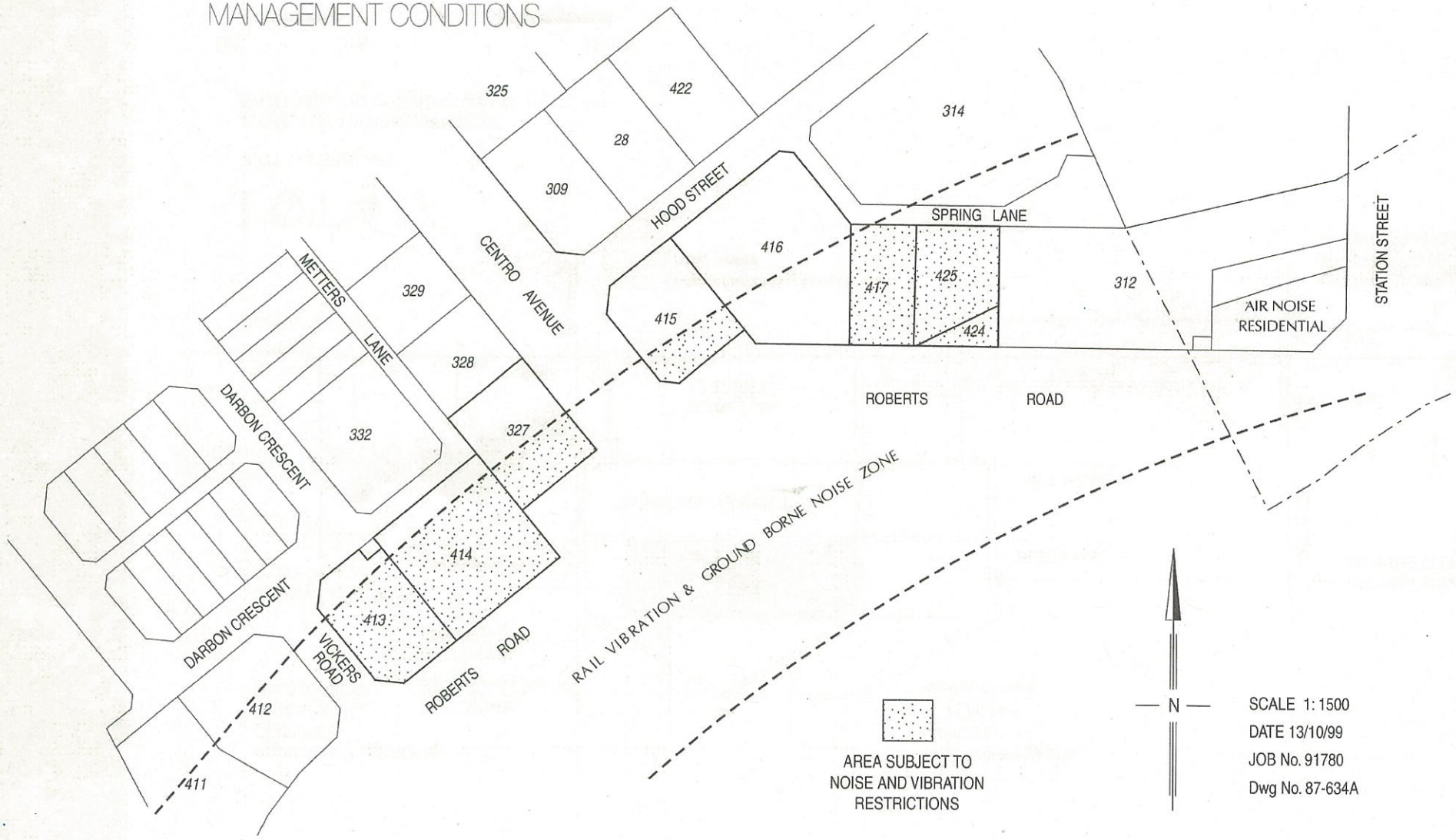
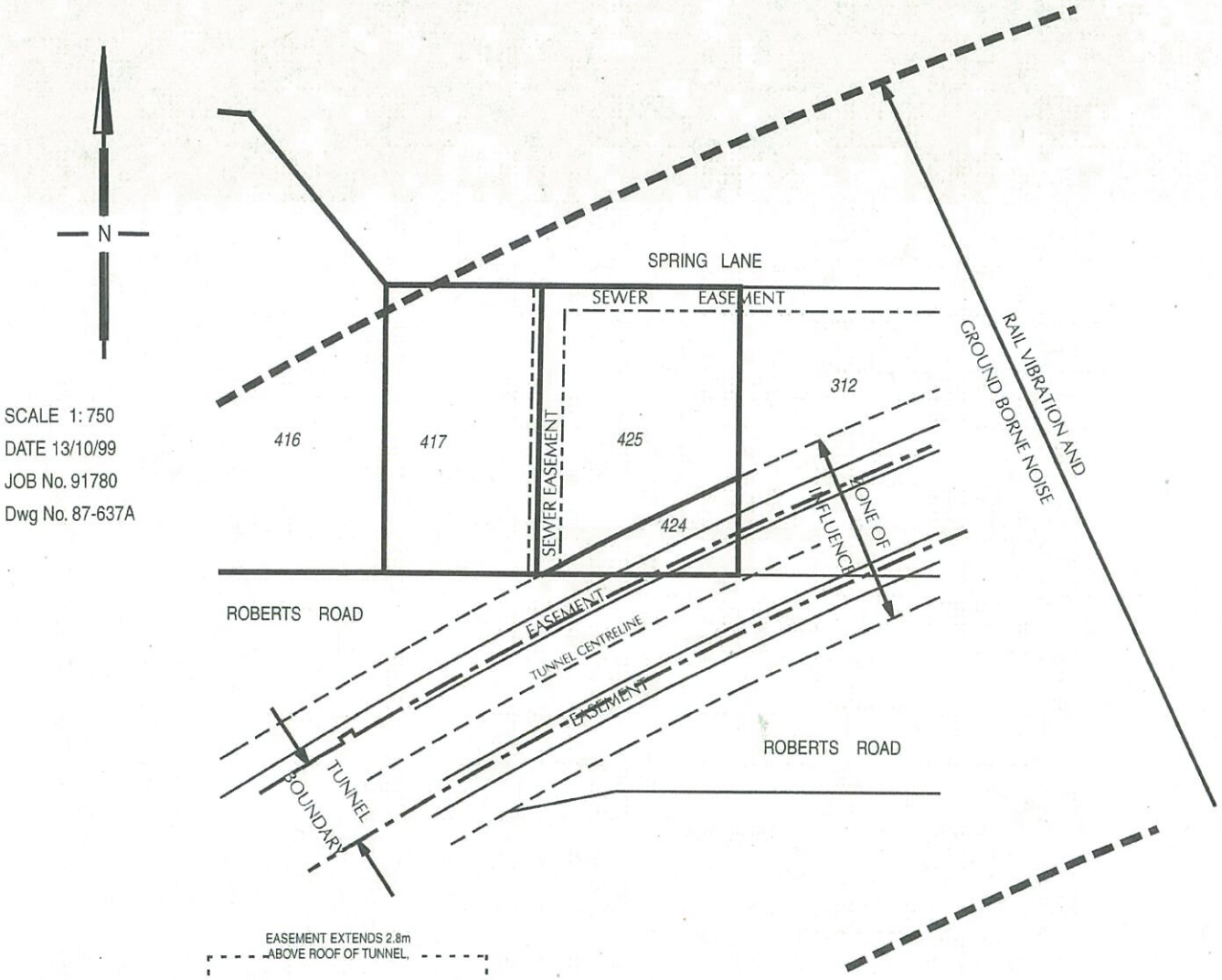
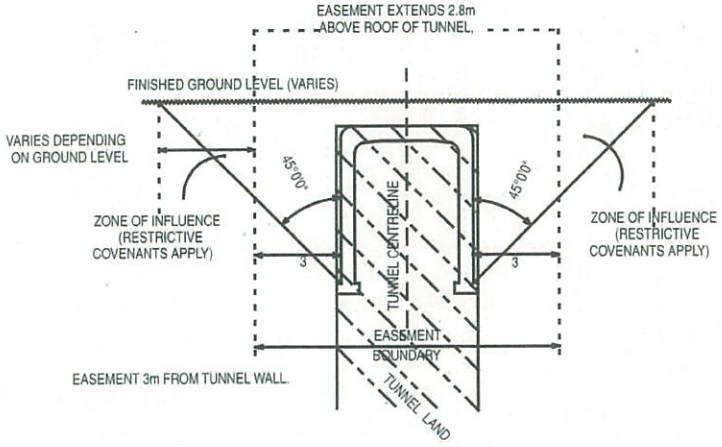


figure 9 - centro place precinct

LOT 424
ENCUMBRANCES





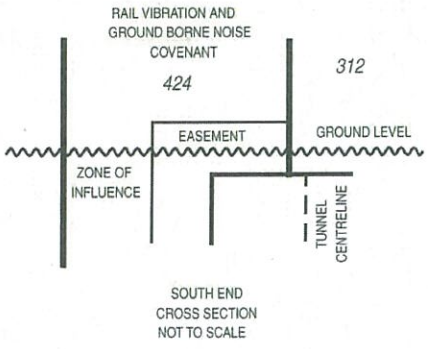
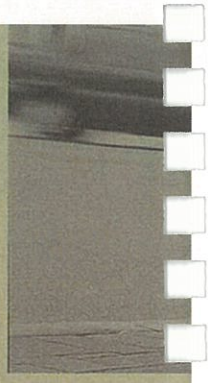


figure 10 - centro place precinct

APPENDIX I



Zone of Influence Specifications

Allowable Loads at Tunnel Roof Level:

Road (Parking Area) Loading

(a) 20 Kpa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) Austroads 92 Loading:

(1) T44 truck loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 16 kPa under each pair of axles; or
(2) HLP 320 loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 20 kPa.

Building Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) building load:

Alternatve Load Combinations	Load Type
(i) Blanket uniformly distributed load; or	20 kPa D.L. + 15 kPa L.L.
(ii) Point load on 7.5m x 7.5m grid plus uniformly distributed load on adjacent area; or	6kPa D.L. + 4 kPa L.L. + 1000kN D.L. + 400 kN L.L.
(iii) Line load at 7.5m centres plus uniformly distributed load on adjacent area	6 kPa D.L. + 4 kPa L.L. + 130 kN/m D.L. + 70 kN/m L.L.

'Line' Loads to be distributed over a contact width of not less than 300mm.
'Point' loads to be distributed over a contact area of not less than 1.0m x 1.0m.

APPENDIX II

- BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application		Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential - Day (7.00am - 11.00pm)		0.2	40
Residential - Night (11.00pm - 7.00am)		0.13	40
Commercial	- General Retail	0.4	60
	- Prestige Retail	0.4	50
	- Office etc	0.4	45
Special Purpose	- Hospital Ward	0.13	35
	- Hospital Operating Theatre	0.13[2]	35
	- Other	Refer to SRA[1]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

SUBIACO
REDEVELOPMENT
AUTHORITY

Further information on any aspect of these guidelines can be obtained by contacting the Authority's Town Planners on 9388 3449.

SUBIACO REDEVELOPMENT AUTHORITY
17 Hood Street
Subiaco WA 6008

Telephone 9388 3449
Facsimile 9388 3412
sra@iinet.net.au

GOVERNMENT OF
WESTERN AUSTRALIA

Centro Place Precinct
Centro Place – Stage 3
Design Guidelines

SUBIACO
REDEVELOPMENT
AUTHORITY

16 February 2000

Subiaco Redevelopment Authority
17 Hood Street
Subiaco WA 6008
Ph: 9388 3449
Fax: 9388 3412
e-mail: sra@.iinet.net.au

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 3 DESIGN GUIDELINES (LOTS 411, 412, 423 & 313)

Context

Refer to the SRA Scheme Text Statement of Intent, Preferred Land Uses and Plot Ratios and the SRA's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to lots 411, 412, 423 & 313 Roberts Road as shown on Figure 1 – Centro Place Subdivision.

Relationship to Planning Scheme and General Planning Policies

The 'preferred' and 'potential' land uses for the Centro Avenue and Centro Place Commercial Area are detailed within clause 42 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

Desired Character

The intent is to create a vibrant mixed-use area having the qualities of a traditional urban commercial precinct. Roberts Road is the primary road within the Centro Place commercial area. It is intended that the scale of development would gradually increase along Roberts Road towards Centro Place itself.

Uses that would be appropriate within the Centro Place Precinct include: offices, mixed-use showroom/commercial buildings, commercial/residential developments, entertainment facilities, restaurants and serviced apartments. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscape that extends from Subiaco Square along Roberts Road.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

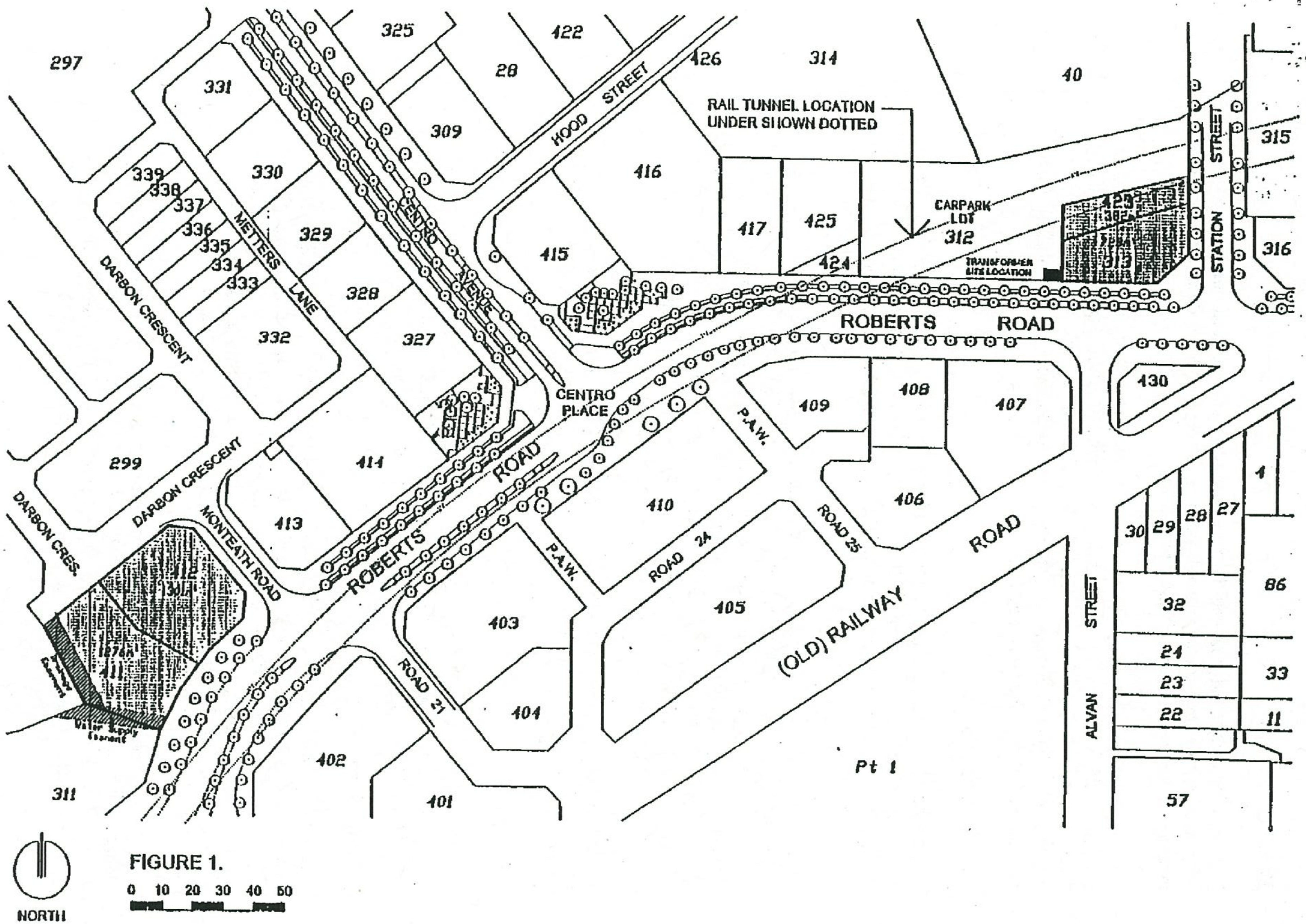

RAIL TUNNEL LOCATION
UNDER SHOWN DOTTED
CARPARK LOT
312
TRANSFORMER SITE LOCATION
ROBERTS ROAD
STATION STREET
HOOD STREET
CENTRO AVENUE
CENTRO PLACE
METTERS LANE
DARBON CRESCENT
DARBON CRES.
MONTEATH ROAD
P.A.W.
ROAD 24
ROAD 25
ROAD 21
(OLD) RAILWAY ROAD
ALVAN STREET
Pt 1
297
325
422
426
314
40
315
316
331
28
309
416
417
425
424
330
339
338
337
336
335
334
333
329
328
332
327
415
430
409
408
407
299
414
410
406
413
403
405
404
402
401
311
30
29
28
27
4
86
32
24
23
22
33
11
57
NORTH
0 10 20 30 40 50

FIGURE 1.

Building Envelope

The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows.

All lots have a minimum building envelope requirement of two storeys with a maximum of three storeys. The maximum permitted eaves/ parapet height above finished site level is 11.7m with a maximum height of any corner statements (only that portion of the development that fronts the truncation) on Lots 412 and 313 adjacent to Roberts Road being 13.7m.

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements.

Lot 313 and 423 are to be sold together (as one parcel and will be seen as one parcel when calculating plot ratio for the site), however lot 423 is affected by the railway tunnel. No development is permitted directly above the tunnel or within the tunnel easement. Development on the remaining portion of lot 423 is not precluded, however all structures should be independent of the tunnel and it's 'zone of influence'. Should the developer wish to build within the 'zone of influence' then the requirements of Appendix I apply with respect to load limits.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. This may be approached by using atriums, courtyards and/or appropriate setbacks.

Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential. Buffer Area Performance Standards apply to residential (see Appendix II).

Building Form

It is anticipated that the majority of development will be for offices and showroom/commercial floorspace. Individual buildings may have a number of different tenant spaces which may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's façade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting.

Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum awning height of 4.5 metres is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards,

Lots 412 and 313 must address and reinforce the corners through the use of parapets, fenestration, entries or roof design.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, façades and parapet detailing.

Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Lots 411 and 412 back onto future residential development. It is important therefore that due consideration be given to the design of their rear elevations. It is a requirement that service areas are properly screened, overlooking is minimised and building plant (air conditioning etc) and lighting are located so as to not impact on the amenity of the adjoining future residential development.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the façade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading.

Roofs must have a minimum pitch of 30° and be constructed of clay or slate tiles or colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall be in conformance with the standards as set within the Redevelopment Scheme.

Car parking on lots 411 and 412 must be accessed via Darbon Crescent. Lots 313 and 423 must be accessed via Station Street.

Railway Tunnel Zone of Influence

Development on lots located adjacent to the rail tunnel (ie Lot 423 only) which results in any load being applied within the zone of influence will be required to comply with the relevant specifications that pertain to the allowable loads on or near the tunnel from buildings founded in the 'Zone of Influence' (see Figure 11). These specifications are summarised in Appendix I. A statement from a structural engineer confirming that these specifications have been met will be required at Building Application stage.

Buffer Area Performance Standards

Development on Lots located within 50m of the rail tunnel (see Figure 10) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendix II. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant, expert in the assessment of vibration and ground borne noise, confirming that the various standards have been met will be required to be lodged at Building Application stage.

Air Borne Noise - Residential

The residential component of any development on lots (Lot 313 & 423) located within the ANR boundary (see Figure 10) are required to comply with Appendix II – Air Borne Noise Residential. The objective is to ensure that developers obtain acoustical advice when designing the building to ensure that the building's construction adequately attenuates noise emissions from suburban passenger trains.

A statement from an acoustical consultant, expert in the assessment of air borne noise, confirming that the various standards have been met will be required to be lodged at Building Application stage.

APPENDIX I

Zone of Influence Specifications

Allowable Loads at Tunnel Roof Level:

Road (Parking Area) Loading

(a) 20 Kpa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) Austroads 92 Loading:

(1) T44 truck loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 16 kPa under each pair of axles; or
(2) HLP 320 loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 20 kPa.

Building Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) building load:

Alternative Load Combinations		Load Type
(i) or	Blanket uniformly distributed load;	20 kPa D.L. + 15 kPa L.L.
(ii)	Point load on 7.5m x 7.5m grid plus uniformly distributed load on adjacent area; or	6kPa D.L. + 4 kPa L.L. + 1000kN D.L. + 400 kN L.L.
(iii)	Line load at 7.5m centres plus uniformly distributed load on adjacent area	6 kPa D.L. + 4 kPa L.L. + 130 kN/m D.L. + 70 kN/m L.L.

'Line' Loads to be distributed over a contact width of not less than 300mm.

'Point' loads to be distributed over a contact area of not less than 1.0m x 1.0m.

APPENDIX II – BUFFER AREA PERFORMANCE STANDARDS

Vibration And Ground-Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[3]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

APPENDIX II - CONTINUED

AIR BORNE NOISE

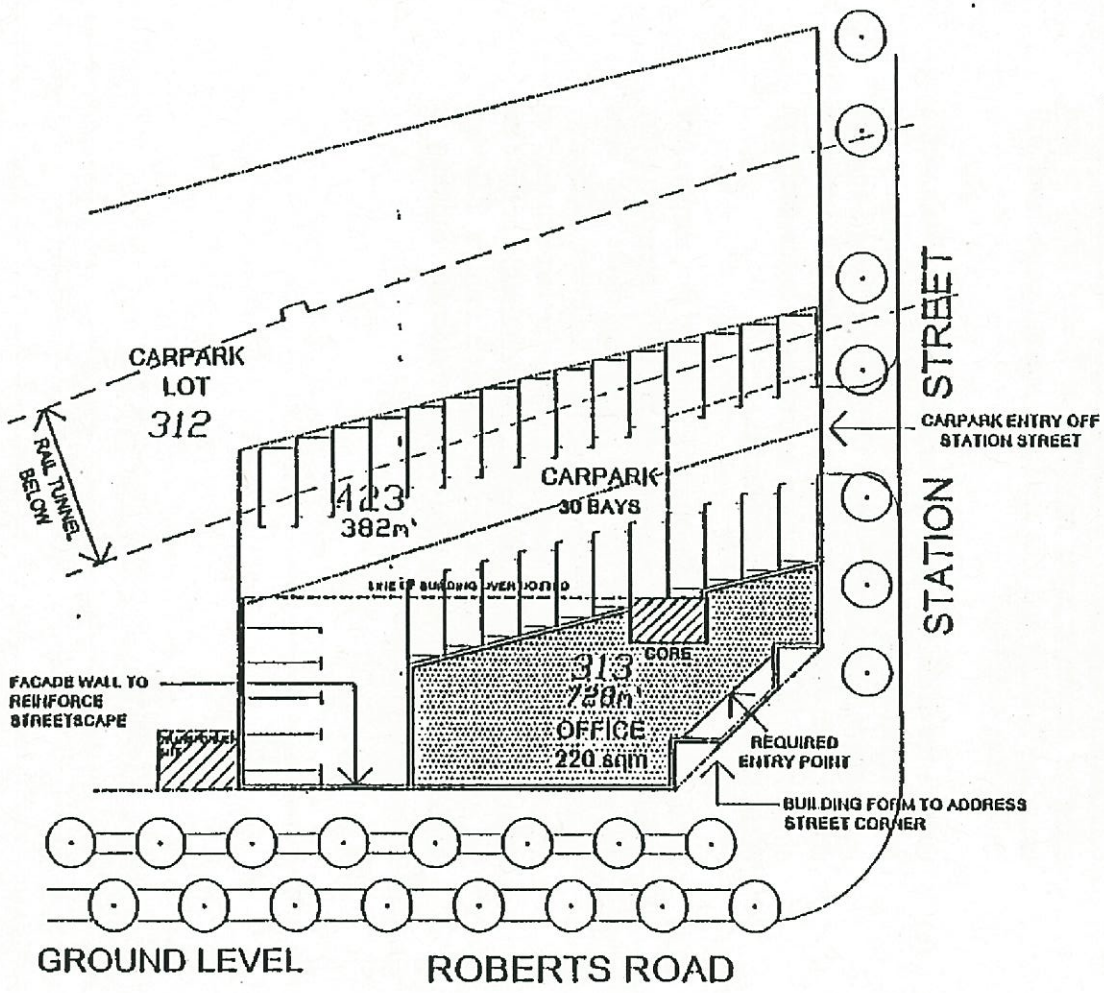
1. Residential

(a) For train noise, the developer is required to comply with an internal L_{Amax} of 45dB(A). (As determined from the Department of Environmental Protection – Draft Impact Policy for Road and Rail Transportation Noise, dated 10/11/97) in respect of all residential developments on the Land.

(b) Within the 65dB(A) noise contour, train noise received at a residential premises comprised in the Land may exceed the internal design criteria depending on the nature of the Building construction. Developers are required to obtain an acoustical consultant's report demonstrating that the Buildings construction adequately attenuates noise emissions from suburban passenger trains travelling at speeds of up to and including 90km/hr and that the L_{Amax} internal noise level will be less than 45dB(A).

(c) Outside the 65dB(A) noise contour, internal noise levels would be acceptable with normal building construction. For residential buildings comprised in the Land requiring a specific acoustical environment, it is recommended that the developer obtains advice from an acoustic consultant as to the adequacy of the proposed building construction.

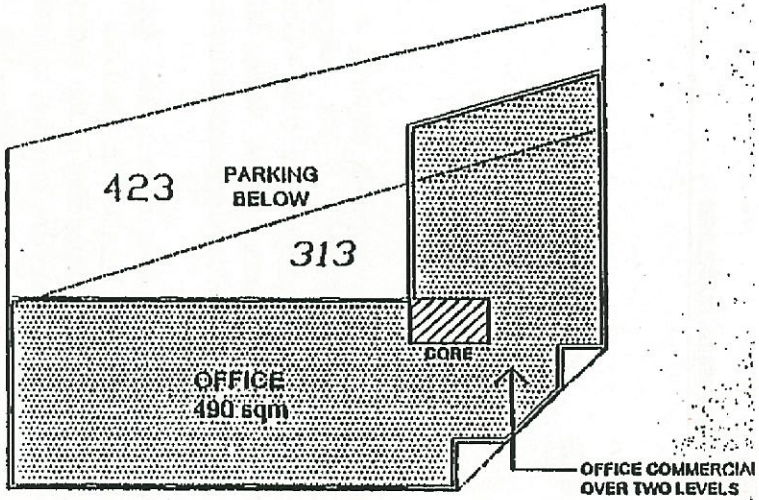
(d) In all cases, when developing the Land for the purposes of residential premises developers need to satisfy themselves that the above criteria are still appropriate and have not been superseded by the requirements of any Relevant Authority. Where the criteria have been superseded, the last standard or criterion shall be used in the design as is applicable at the date on which the relevant approval required from a Relevant Authority to the construction of any residential Building is obtained by the developer.



DEVELOPMENT SUMMARY:

OFFICE AREA.	GROUND FLOOR	220 sqm
	LEVELS 1 & 2	980 sqm
	TOTAL	1200 sqm

CARPARKING REQUIREMENT: 1 BAY / 40 sqm OFFICE (30 BAYS)
30 BAYS PROVIDED



LEVELS 1 & 2

LOTS 313 & 423

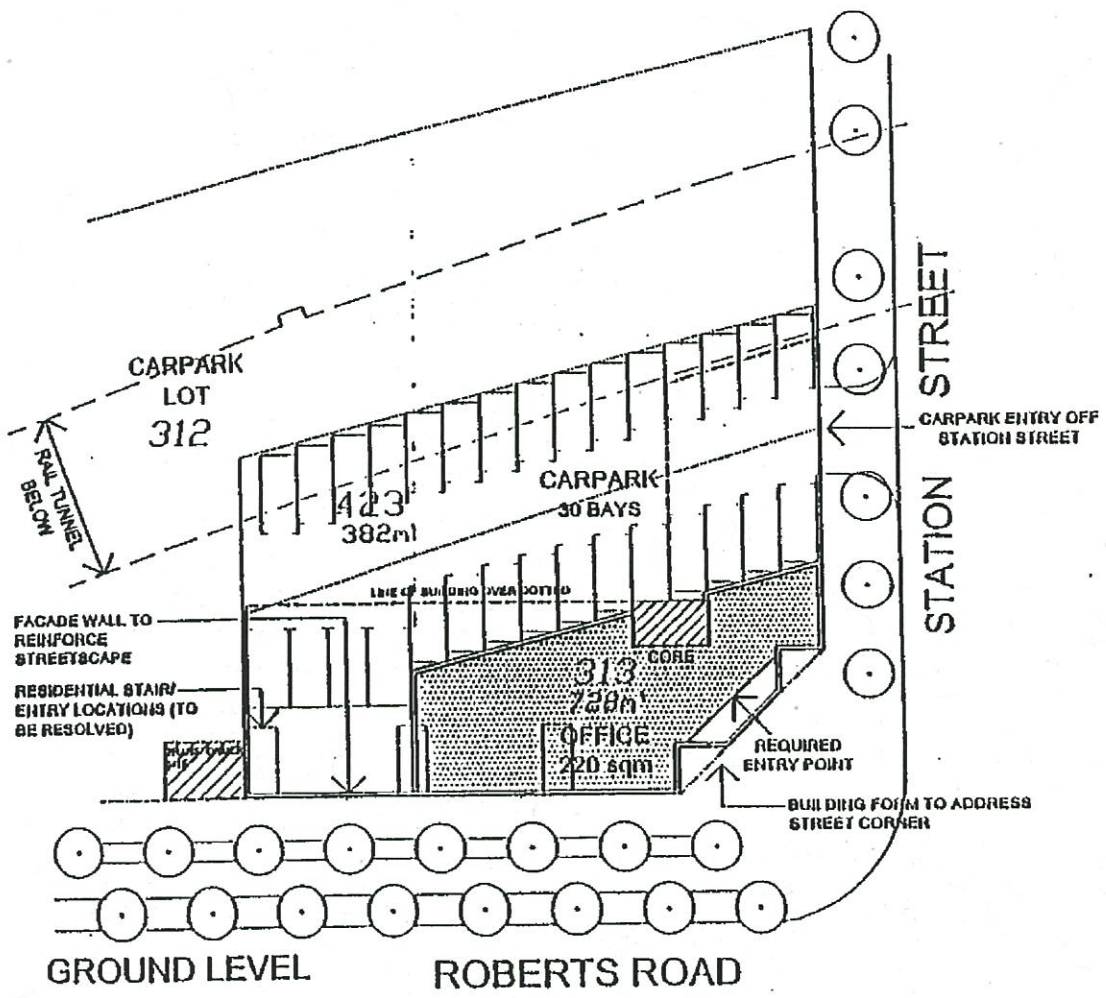
DEVELOPMENT OPTION 2: COMMERCIAL

0 2 4 6 8 10 20

NORTH

FIGURE 2

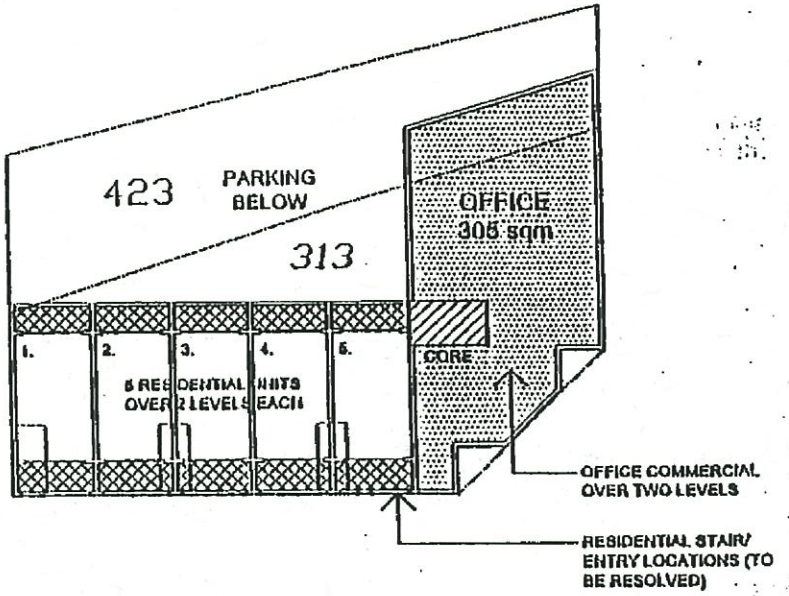
** DESIGN GUIDE SCHEMATIC OPTION
INDICATIVE INFORMATION ONLY



DEVELOPMENT SUMMARY:

OFFICE AREA.	GROUND FLOOR	220 sqm
	LEVELS 1 & 2	610 sqm
	TOTAL	830 sqm

CARPARKING REQUIREMENT: 1 BAY / 40 sqm OFFICE (21 BAYS)
RESIDENTIAL UNITS (5-10 BAYS)
30 BAYS PROVIDED



LEVELS 1 & 2

LOTS 313 & 423

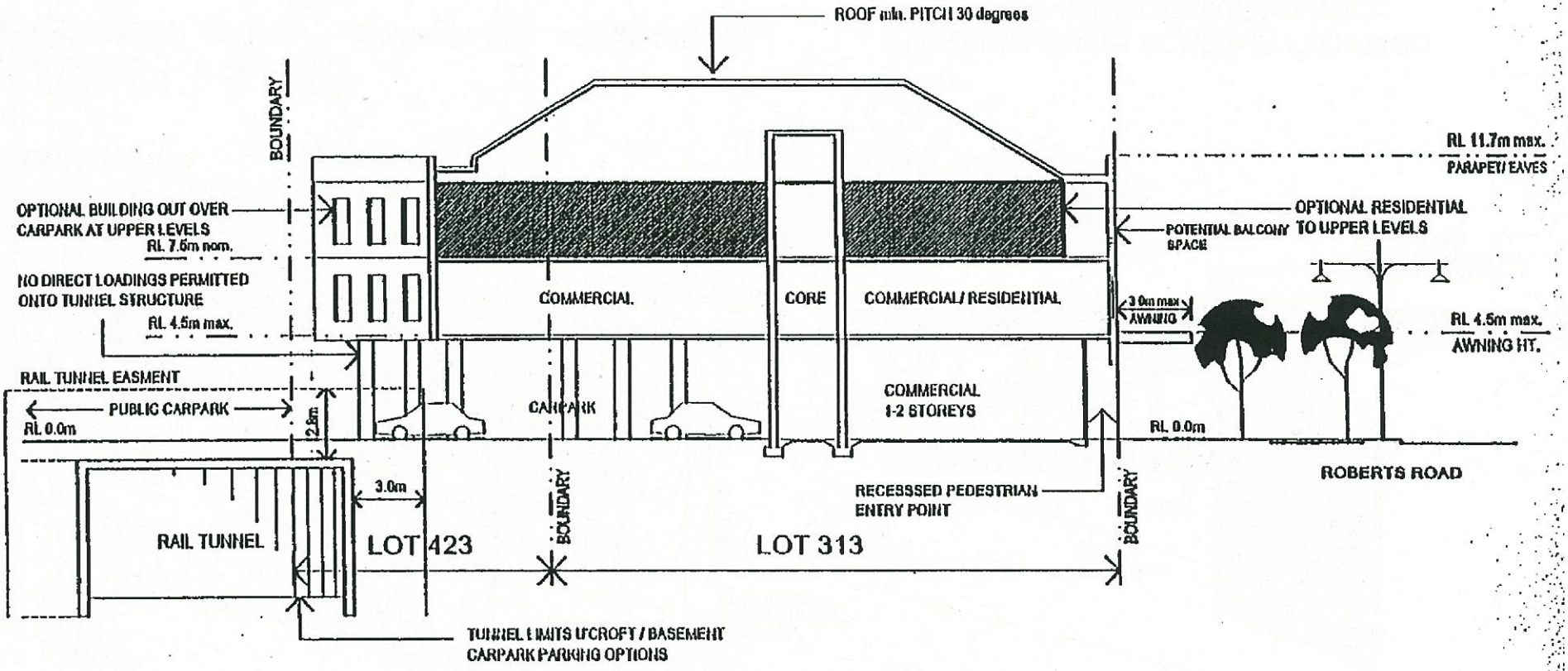
DEVELOPMENT OPTION 1:. RESIDENTIAL / COMMERCIAL

0 2 4 6 8 10 20

NORTH

FIGURE 3

** DESIGN GUIDE SCHEMATIC OPTION
INDICATIVE INFORMATION ONLY

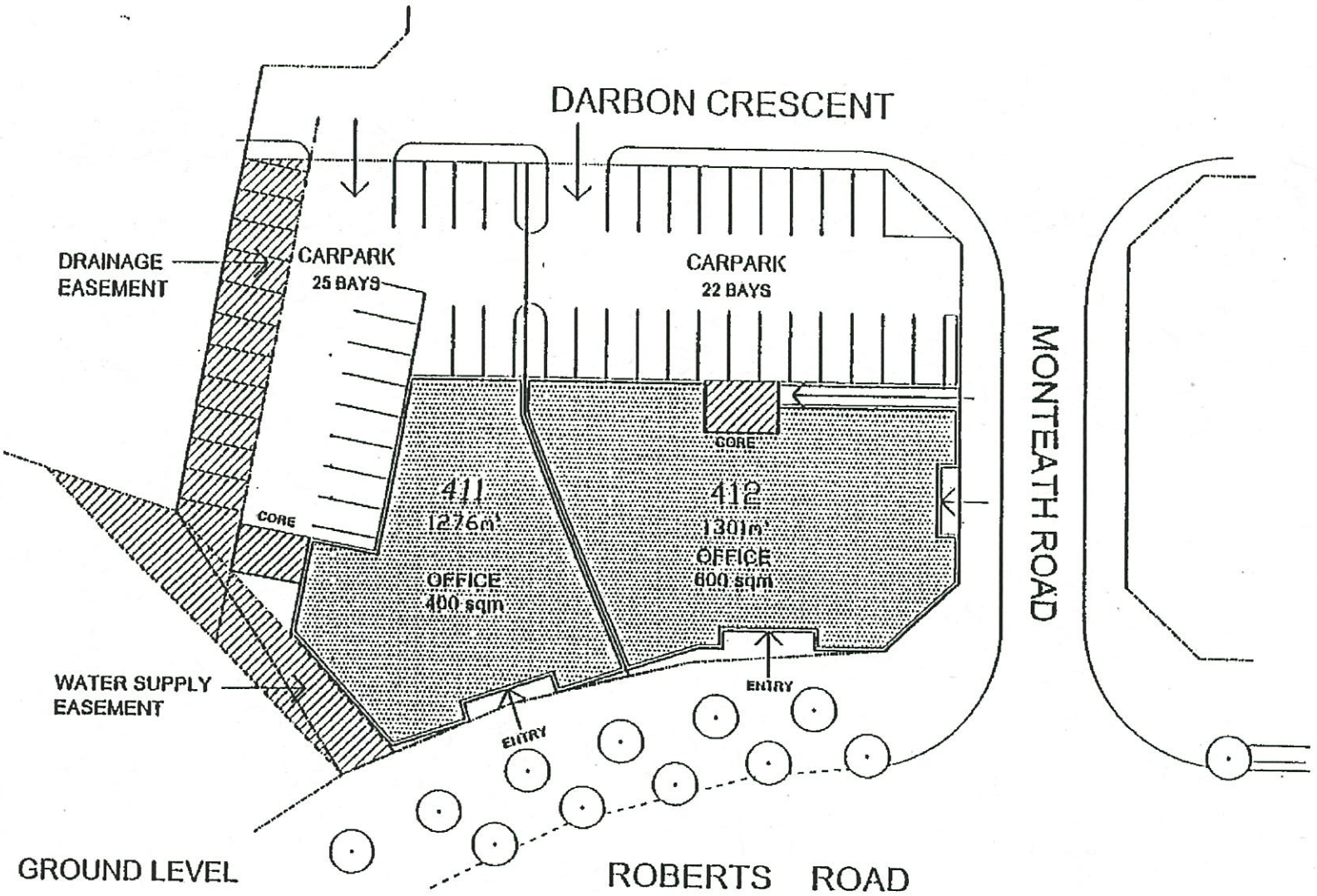


LOTS 313 & 423

* MINIMUM 2 STOREYS
MAXIMUM 3 STOREYS

0 1 2 3 4 5 10

FIGURE 4



LOTS 411 & 412

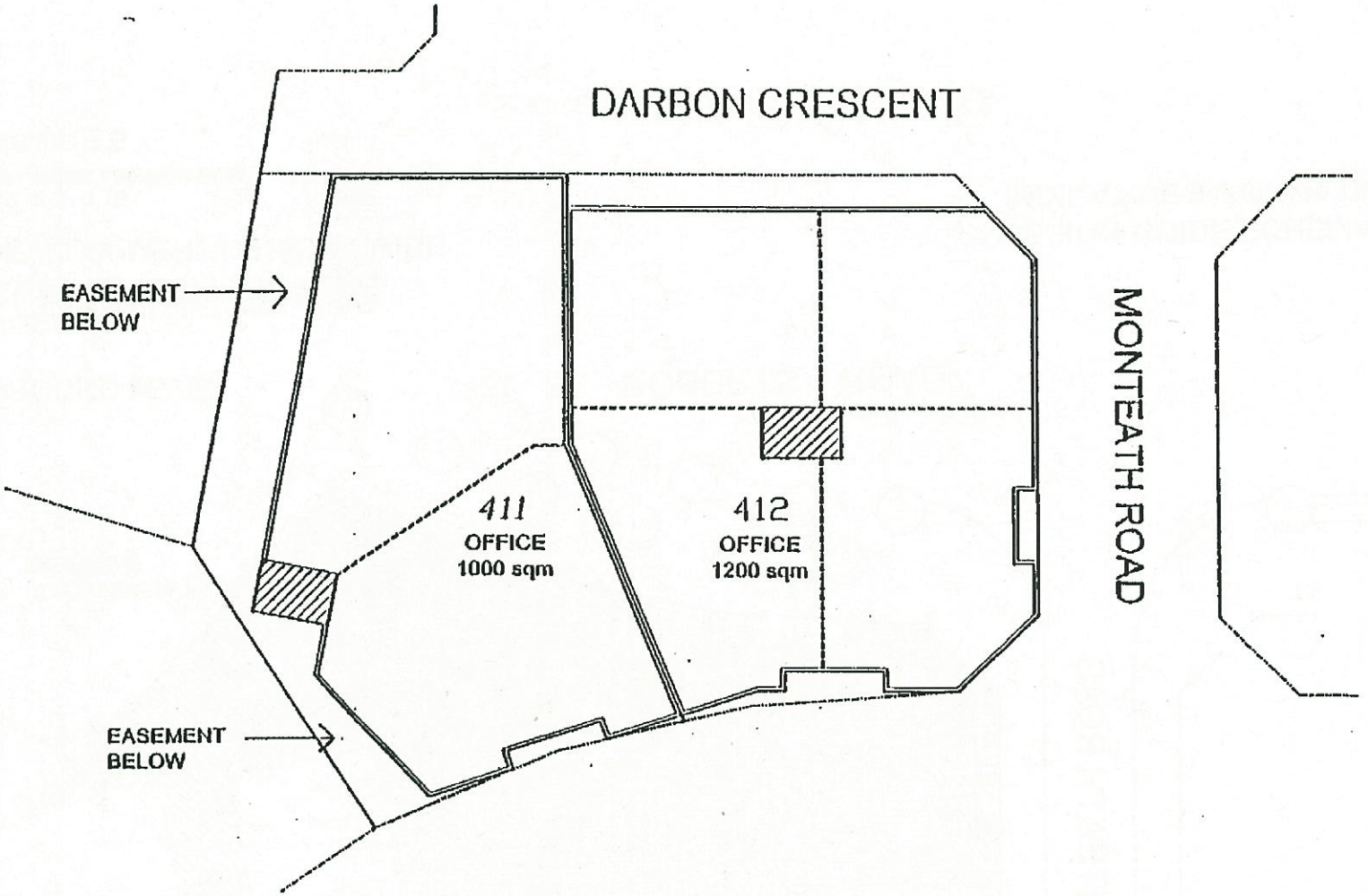
DEVELOPMENT DESIGN GUIDE

0 2 4 6 8 10 20

NORTH

FIGURE 5

** DESIGN GUIDE SCHEMATIC OPTION
INDICATIVE INFORMATION ONLY



LOTS 411 & 412

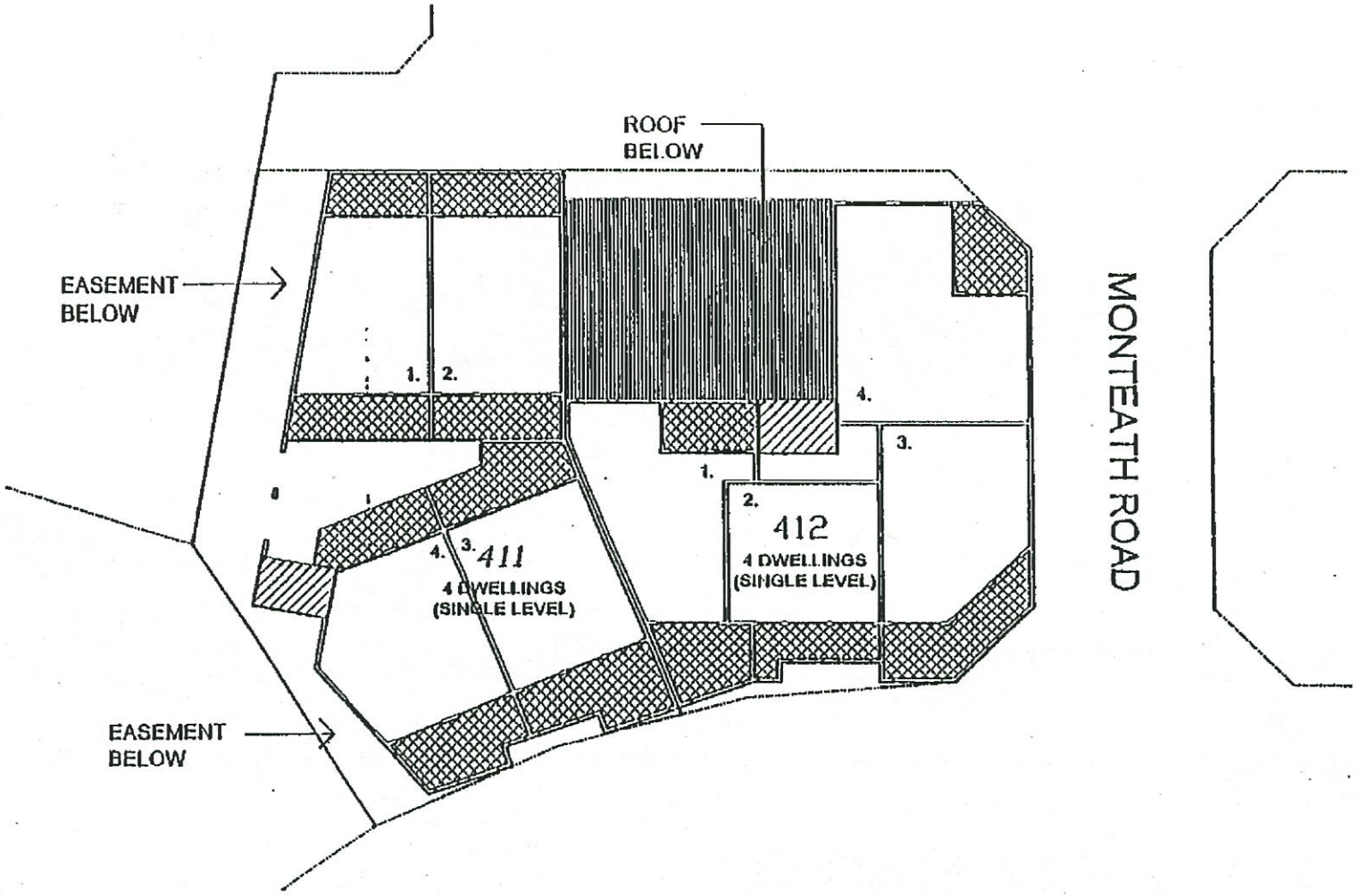
DEVELOPMENT DESIGN GUIDE

0 2 4 6 8 10 20

NORTH

FIGURE 6

** DESIGN GUIDE SCHEMATIC OPTION
INDICATIVE INFORMATION ONLY



LEVEL 2

ROBERTS ROAD

LOTS 411 & 412

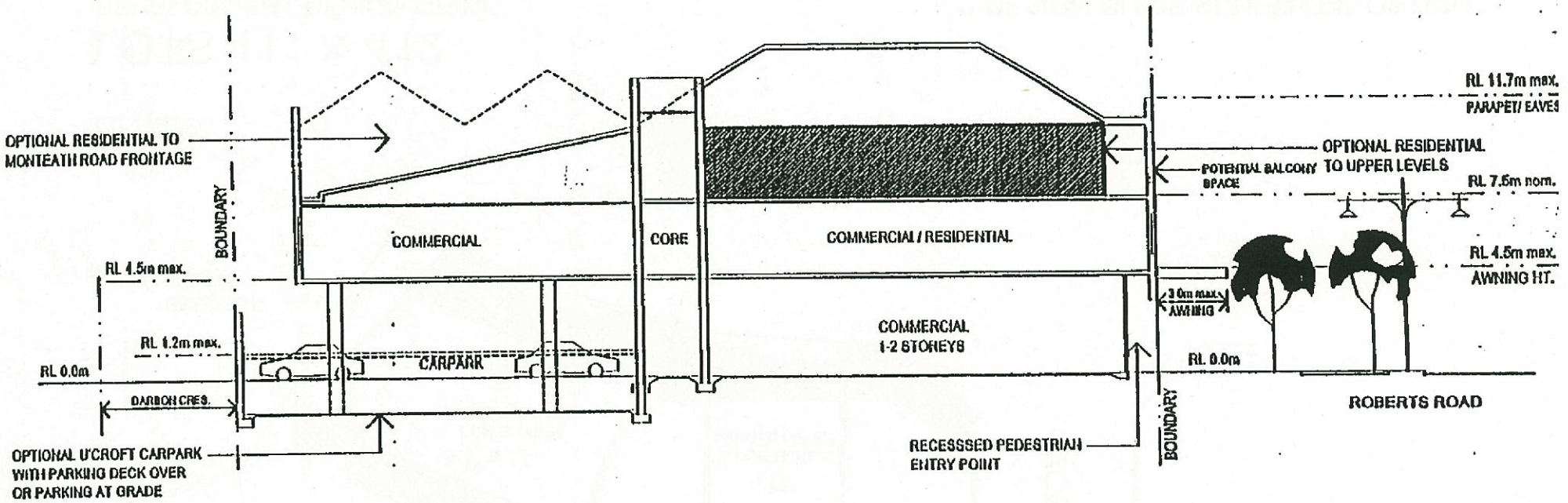
DEVELOPMENT DESIGN GUIDE

0 2 4 6 8 10 20

NORTH

FIGURE 7

** DESIGN GUIDE SCHEMATIC OPTION
INDICATIVE INFORMATION ONLY



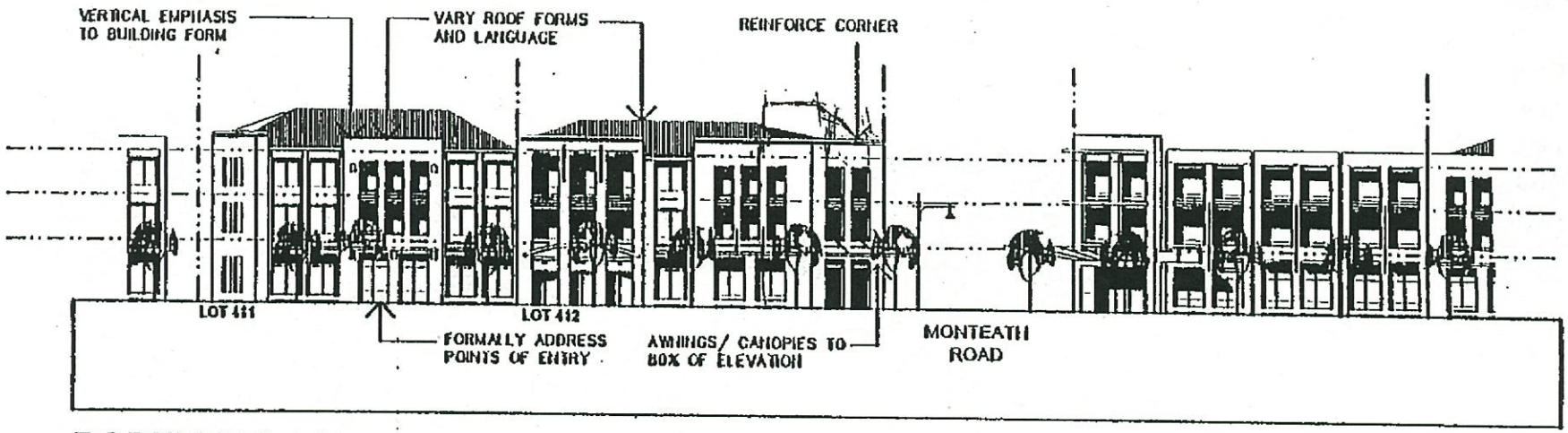
LOTS 411 & 412

(SECTION THROUGH LOT 412)

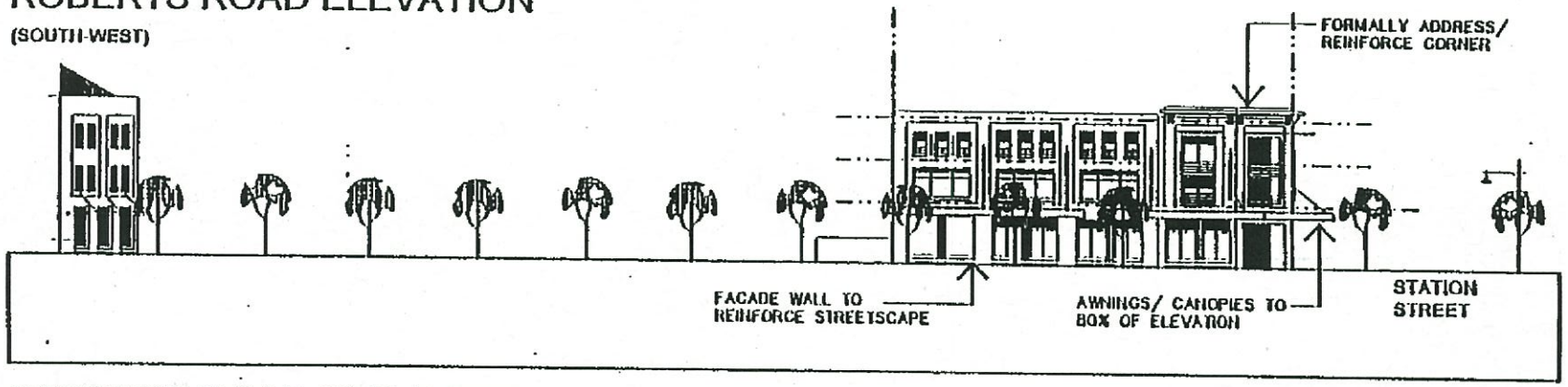
* MINIMUM 2 STOREYS
MAXIMUM 3 STOREYS

0 1 2 3 4 5 10

FIGURE 8



ROBERTS ROAD ELEVATION
(SOUTH-WEST)



ROBERTS ROAD ELEVATION
(NORTH-WEST)

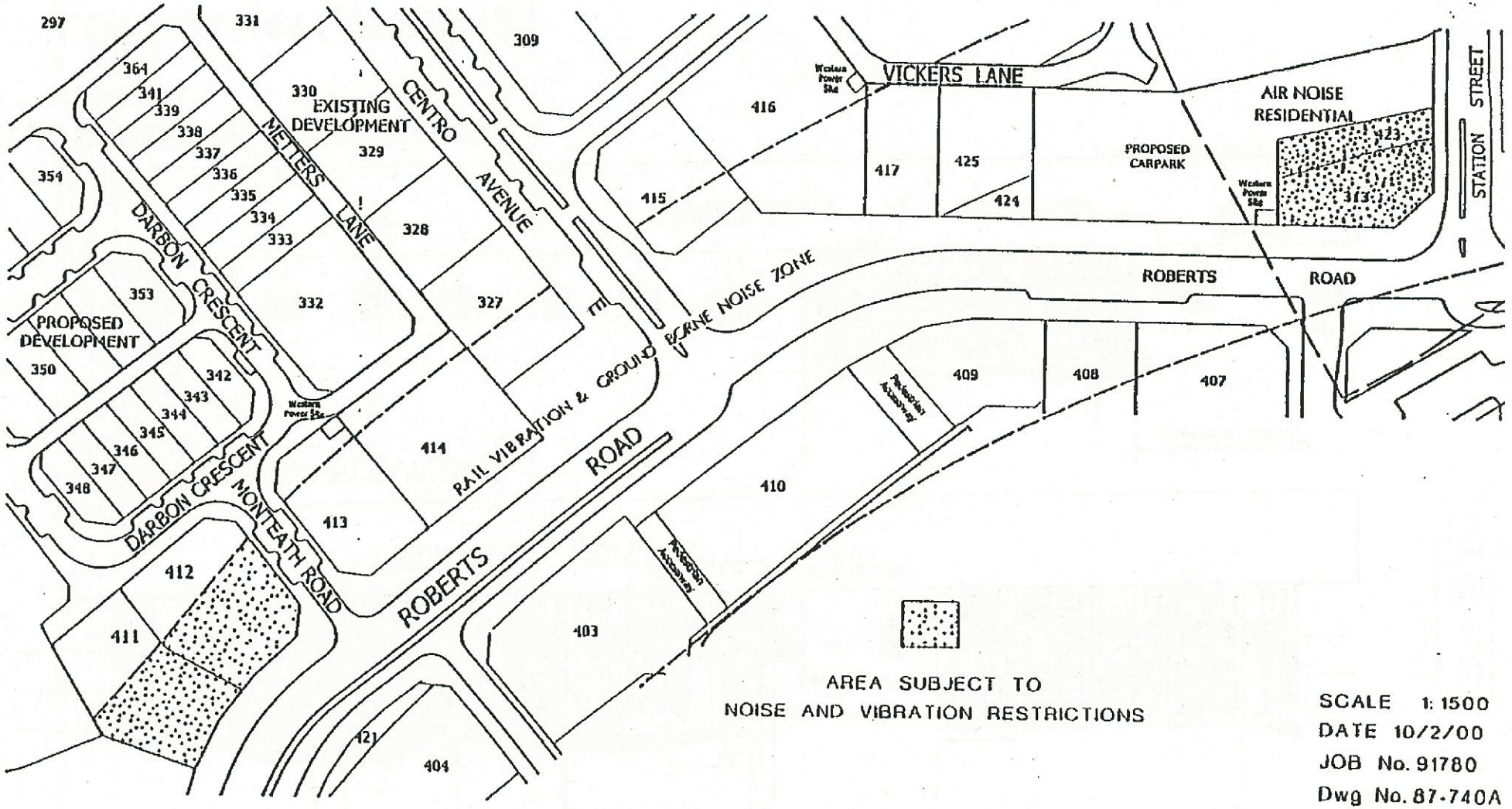
LOTS 313,411,412 & 423

INDICATIVE ELEVATION

0 2 4 6 8 10 20

FIGURE 9

AFFECTED BY NOISE AND VIBRATION MANAGEMENT CONDITIONS

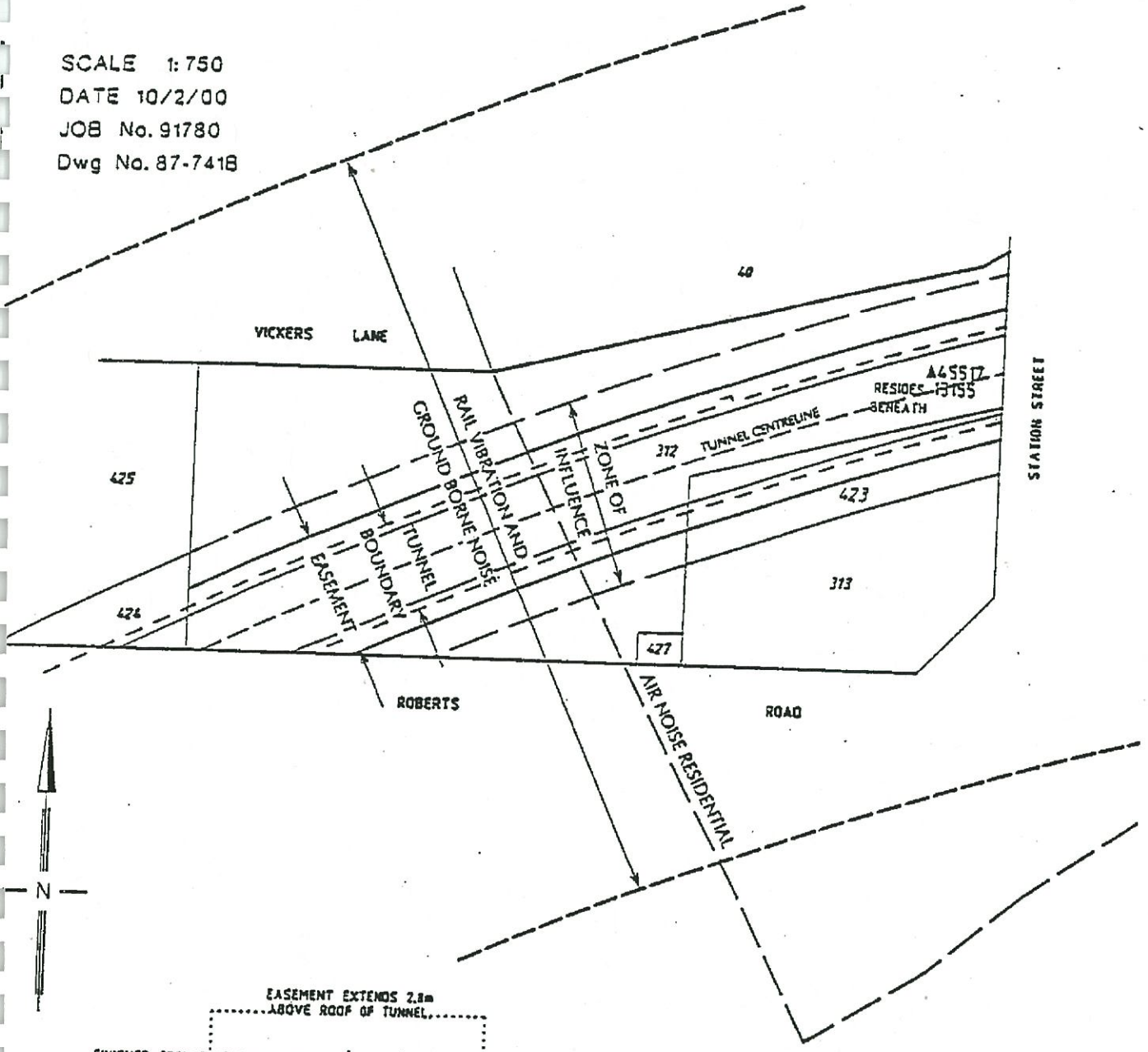


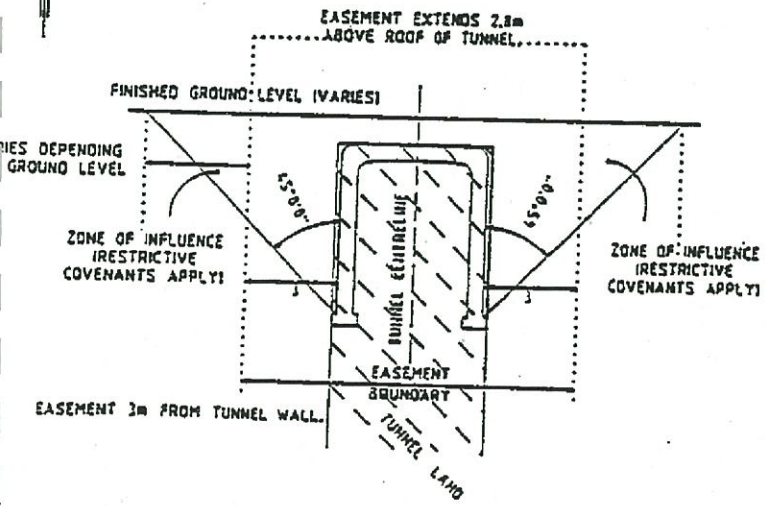
SCALE 1:1500
DATE 10/2/00
JOB No. 91780
Dwg No. 87-740A

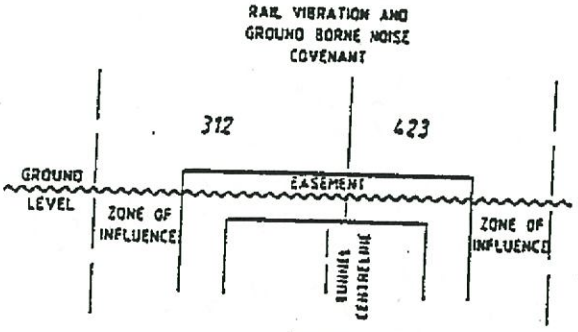
FIGURE 10

LOT 423
ENCUMBRANCES

SCALE 1:750
DATE 10/2/00
JOB No. 91780
Dwg No. 87-7418







TYPICAL CROSS SECTION NOT TO SCALE

FIGURE 11

THE SUBI CENTRO PROJECT • INNOVATIVE URBAN RENEWAL

SUBI CENTRO
a place for all

CENTRO PLACE PRECINCT
CENTRO PLACE STAGE 4
DESIGN GUIDELINES
(LOTS 406 – 409)

Subiaco Redevelopment Authority

SUBIACO REDEVELOPMENT AUTHORITY

ADDENDUM

SALE BY TENDER

COMMERCIAL/MIXED USE LAND

Lot 406 Subiaco Road and Lots 407, 408 and 409 Roberts Road, Subiaco

Following further detailed design work on the potential development of Lot 406 Roberts Road, it is considered that there may be a difficulty providing the required number of parking bays within a basement car park if vehicle access were required to be via Road 25 cul-de-sac as illustrated in the Design Guidelines given the fall of the land.

The most desired location for access into Lot 406 is, therefore, via Subiaco Road so that an extensive ramp is not required to reach a basement level.

Should, however, a double crossover to Lot 406 be permitted onto Subiaco Road, in addition to the double crossover for Lot 407 abutting Lot 406, then the Authority is concerned at the impact that these combined crossovers will have on the streetscape and the number of on street car parking bays.

Given the above, it has been determined that vehicle access to Lots 406 and 407 will need to be via a shared crossover onto Subiaco Road on the boundary between Lots 407 and 406.

The width of the shared crossover will need to be determined at detailed design stage, but must allow for a separate in and out crossover divided by an island that allows for supporting columns for the above development.

The crossover will be the subject of an easement or 'Reciprocal Rights of Access Agreement' ensuring legal access to both lots is maintained. Such agreement or easement will be required by way of a condition imposed on any development approval to be prepared by the Authority's solicitors at the purchaser's expense.

The Authority has received a request from the owner of the car park on Lot 312 Roberts Road to advise prospective purchasers that this car park is not a public car park. The purchaser, therefore, acknowledges that the car park constructed on Lot 312 Roberts Road and shown on the advertisement for the sale of the above lots is not a public car park.

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 4
DESIGN GUIDELINES (LOTS 406 – 409)

July 2000

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 4 DESIGN GUIDELINES (LOTS 406 - 409)

Context

Refer to the SRA Scheme Text Statement of Intent, Preferred Land Uses and Plot Ratios and the SRA's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to lots 406 – 409 located at the corner of Subiaco Road, Alvan Street and Roberts Road as shown on Figure 1 – Location Plan

Relationship to Planning Scheme and General Planning Policies

The 'preferred' and 'potential' land uses for the Centro Avenue and Centro Place Commercial Area are detailed within clause 42 and 45 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

Desired Character

The intent is to create a vibrant mixed-use area having the qualities of a traditional urban commercial precinct. Roberts Road is the primary road within the Centro Place commercial area. It is intended that the scale of development would gradually increase along Roberts Road towards Centro Place itself.

Uses that would be appropriate within the Centro Place Precinct include: offices, mixed-use showroom/commercial buildings, commercial/residential developments, entertainment facilities, restaurants and serviced apartments. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscape that extends from Subiaco Square along Roberts Road.

Applicants should refer to Site Design Guidelines – Sheets 1 and 2, for an indicative application of these development standards.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows. (Refer Site Design Guidelines Sheet 1)

Lot 409 is perceived to be a prominent site near the entry to Centro Place. For this lot, the building shall have a minimum of three storeys with a maximum of four storeys. The maximum permitted eaves/parapet height above finished site level is 14.0metres.

Lots 406, 407 and 408 shall have a minimum building height of two storeys with a maximum of three storeys. The maximum permitted eaves/ parapet height above finished site level is 11.7metres, with a maximum height of any corner statements (only that portion of the development that fronts the truncation) on Lots 406 and 407 being 13.7metres (Refer Site Design Guidelines Sheet 2). Development on Lot 407 should sufficiently address both corners to which it fronts.

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to 3metres being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements.

Portions of Lots 407, 408 and 409 are located within the railway tunnel buffer area. Development within this area must demonstrate compliance with the vibration and ground-borne noise criteria as set out in Appendix I – Buffer Area Performance Standards.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. This may be achieved by using atriums, courtyards and/or appropriate setbacks.

Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential.

Residential Density

The maximum residential density for development in this precinct is R80.

Building Form

It is anticipated that the majority of development will be for offices and showroom/commercial floorspace. Individual buildings may have a number of different tenant spaces that may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's facade through the use of canopies (limited in depth to 3metres), steps, recesses, building material changes and lighting.

Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum height an awning can be above the footpath is 4.5 metres..

Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards,

Lots 406 and 407 must address and reinforce the corners through the use of parapets, fenestration, entries or roof design. Lot 409 must sufficiently address the public access way through the use of parapets, fenestration, entries or roof design

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, facades and parapet detailing.

Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, fascias, gutters, parapet detailing or balustrading.

Roofs must have a minimum pitch of 30 degrees and be constructed of clay tiles or colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials, air-conditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Redevelopment Authority's Signage Policy for details.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on lots 406, 408 and 409 must be obtained via the rear service lane (Road 25). Lot 407 must gain primary access via the designated location on Subiaco Road as determined by the Redevelopment Authority. Secondary access to Lot 407 may be obtained via Alvan Street at a location agreed to by the

Redevelopment Authority. See Site Design Guidelines Sheet 1 for indicative car parking and access layouts.

Services

Developments on all lots have access to all urban services. All piped and wired services, air conditioners, hot water storage etc, should not be visible from the public realm.

Buffer Area Performance Standards

Development on Lots located within 50metres of the rail tunnel (Lots 407,408 and 409) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendix I. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant, expert in the assessment of vibration and ground borne noise, confirming that the various standards have been met will be required at Building Application stage.

Future Development

The proposed subdivision of the land to the west of Lots and the construction of Road 24 as shown on Figure 1: Location Plan are indicative only and do not represent final outcomes. The Design Guidelines must be read in light of this.

APPENDIX I – BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

Any residential, retail, commercial or special purpose development with a building footprint falling within 50 metres of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below (See Figure 2 – Area Affected by Noise and Vibration Management Conditions). Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

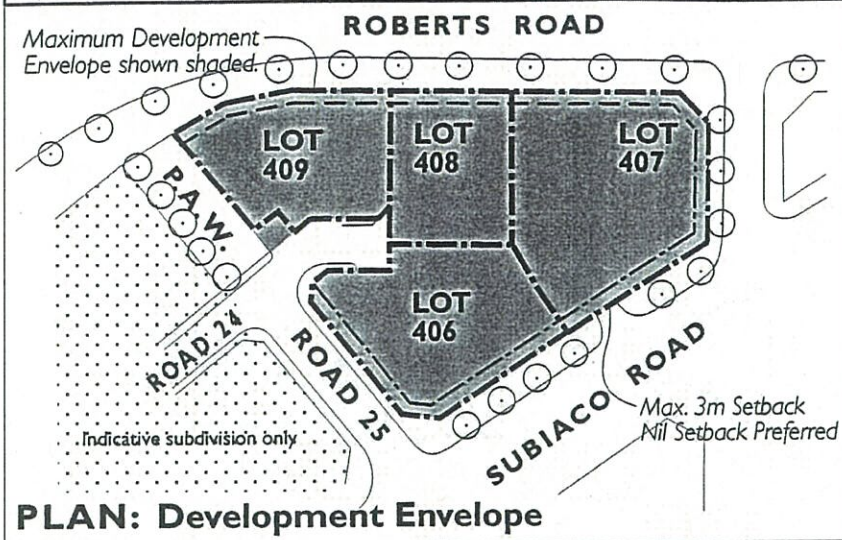
Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[1]	Refer to SRA[3]

Notes:

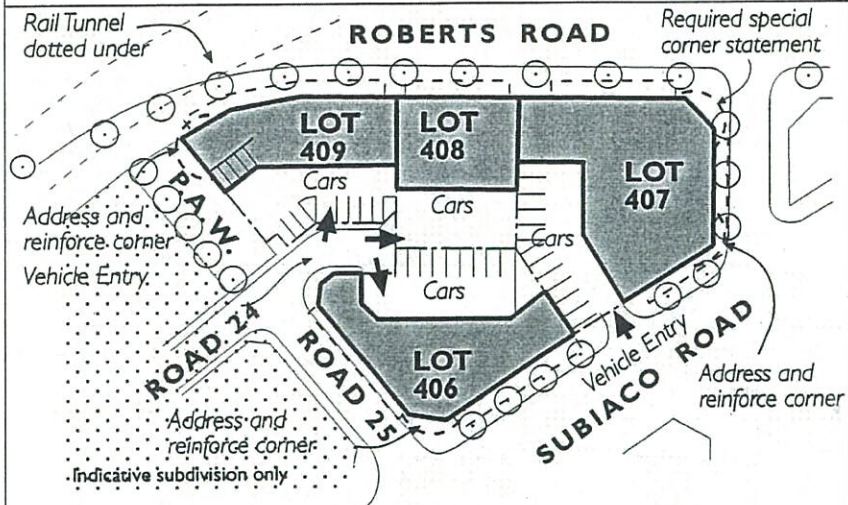
1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA."

CENTRO PLACE - STAGE 4
LOTS 406 - 409

SITE DESIGN GUIDELINES
SHEET 1



PLAN: Development Envelope



PLAN: Suggested Site Access & Carparking

NOTE; Suggested building envelope options shown shaded.

These Development Guidelines apply to Lots 406 - 409.

PLOT RATIO

Max. Plot Ratio of 2:1 of which no more than 50% of the floorspace may be residential.

RESIDENTIAL DENSITY

A Maximum Residential Density of R80 applies.

BUILDING ENVELOPE

STOREYS:	*Min.*	*Max.*
Lot 406	*2*	*3*
Lot 407	*2*	*3*
Lot 408	*2*	*3*
Lot 409	*3*	*4*

SETBACKS

Street Boundaries	*min - nil max - 3m (nil setback preferred)*
Side/Rear Boundaries	*min - nil*

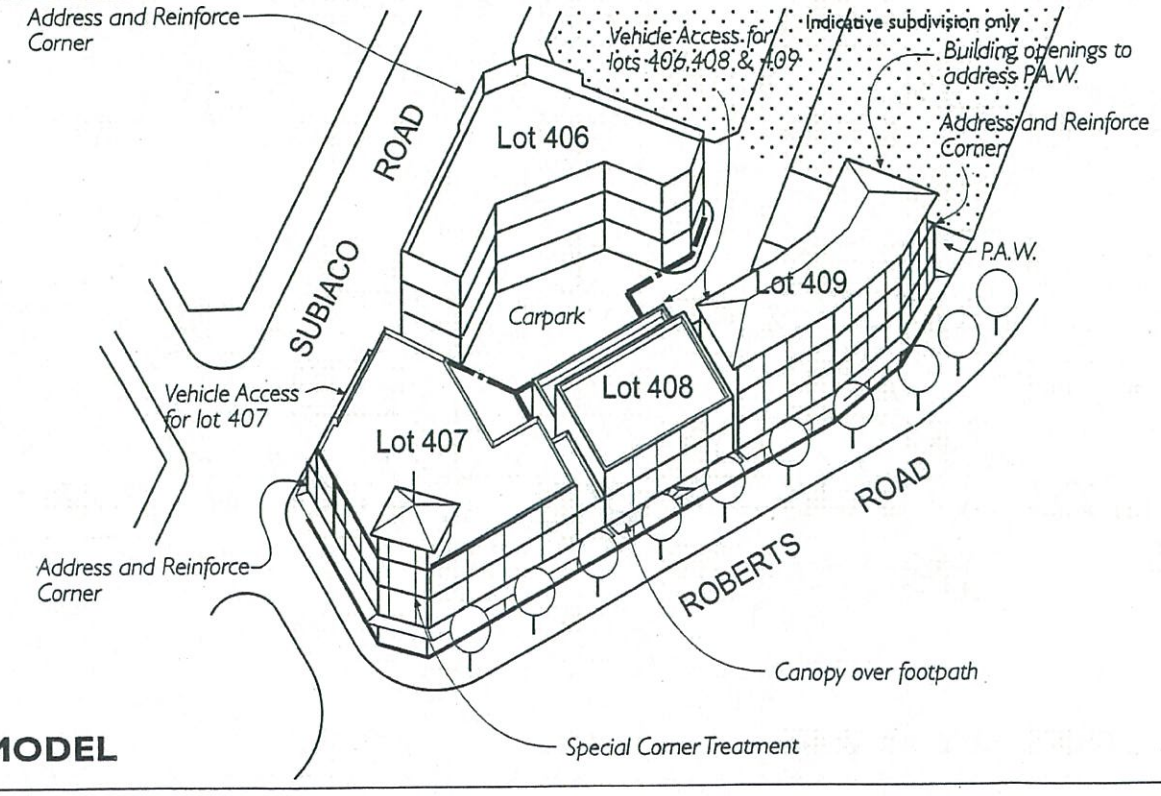
ACCESS / CAR PARKING / SERVICE AREA

All vehicular access shall be obtained via the designated crossovers as shown on the plan.
- All parking areas shall be located to the rear of the development.

MISCELLANEOUS

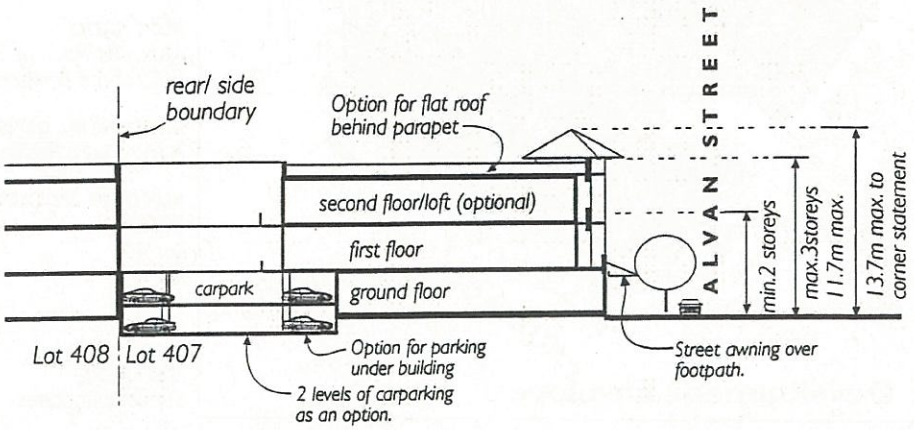
- Lot 407 required to have special corner statement. Lots 406 & 409 should address and reinforce corners where shown on plan .
- Solid fencing along any boundary will not be permitted.
- Blank walls are not permitted fronting the public domain.
- Awnings required to minimum 80% of street facades.

NOTE; All building forms shown are indicative only and do not represent final outcomes.

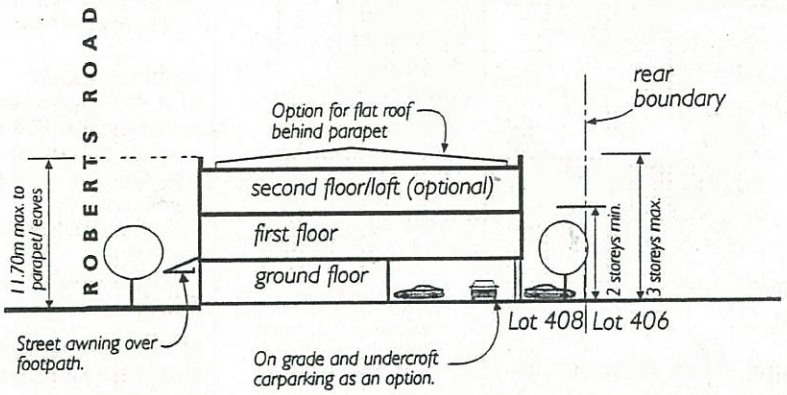


3D MODEL

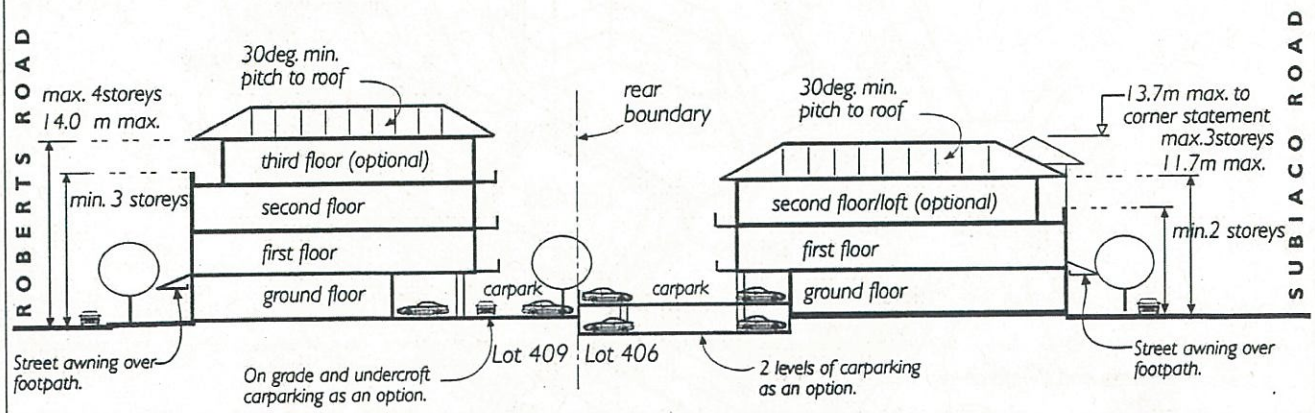
CENTRO PLACE - STAGE 4 LOTS 406 - 409		SITE DESIGN GUIDELINES SHEET 2



SECTION: Lot 407

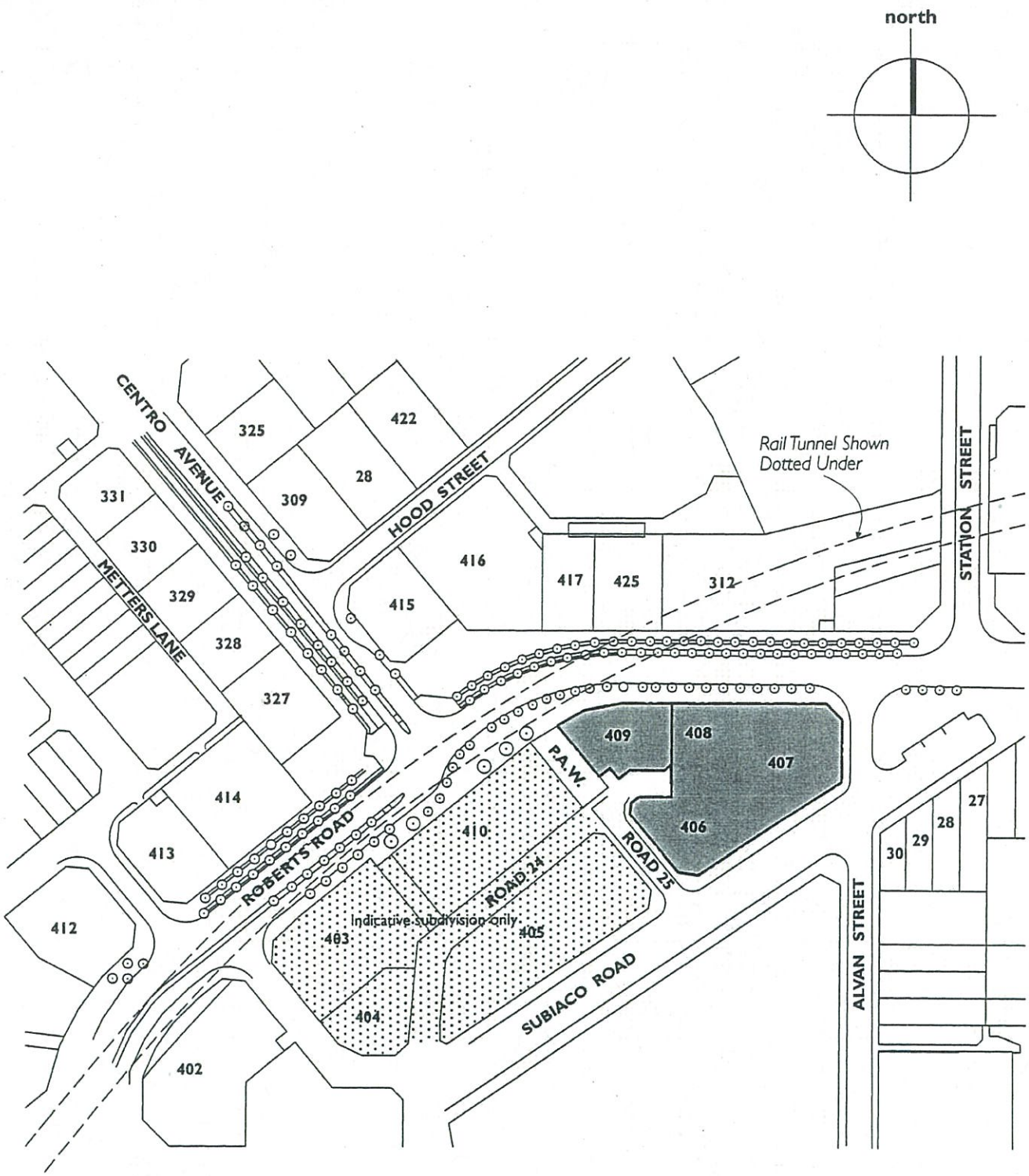


SECTION: Lot 408



SECTION: Lots 406 & 409

CENTRO PLACE - STAGE 4
FIGURE 1: LOCATION PLAN



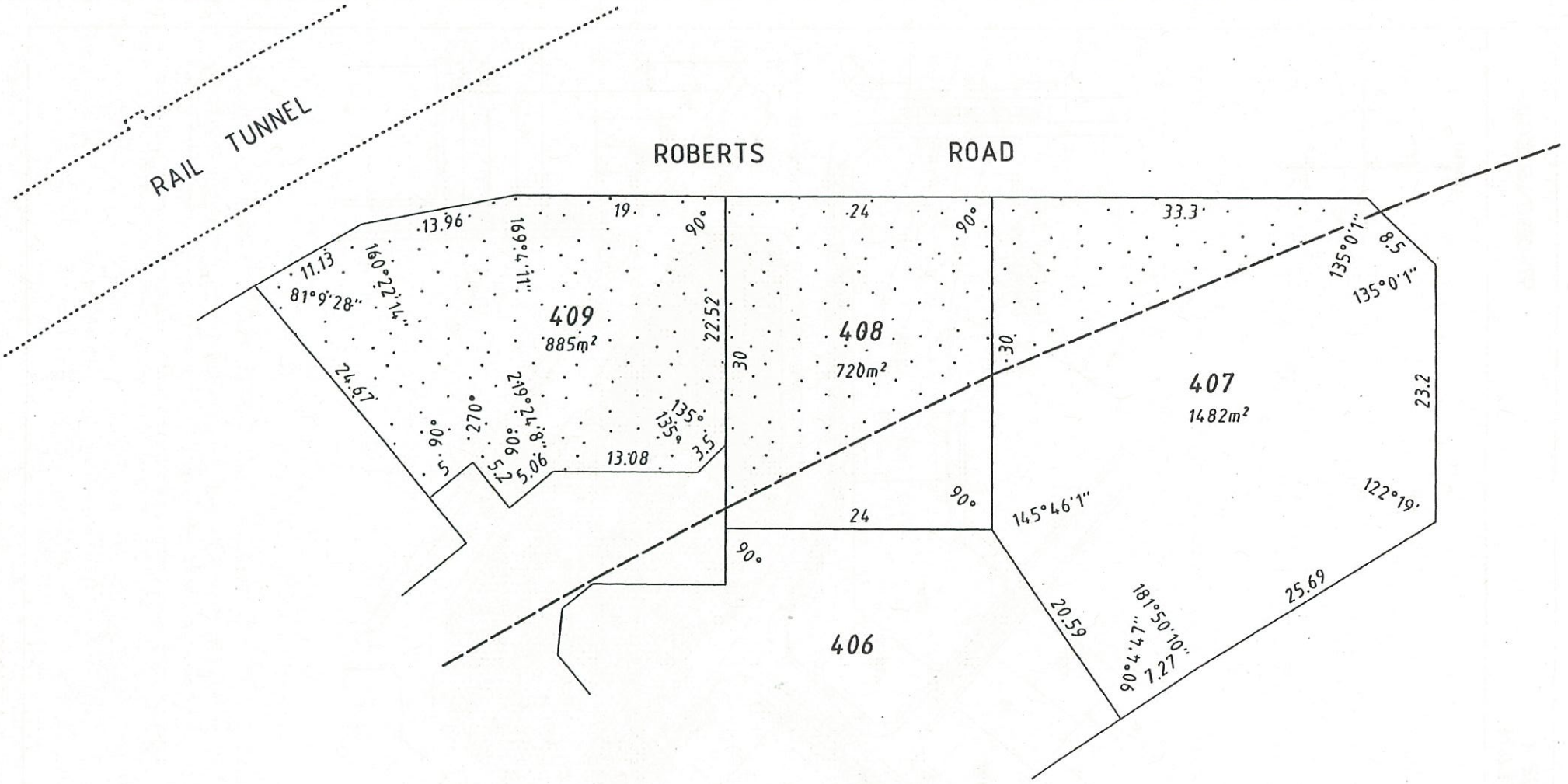


FIGURE 2

AREA AFFECTED
BY NOISE AND VIBRATION
MANAGEMENT CONDITIONS

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 5
DESIGN GUIDELINES
(LOTS 401, 402 AND 421)

December 2000

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 5 DESIGN GUIDELINES (LOTS 401, 402 and 421)

Context

Refer to the Subiaco Redevelopment Scheme Text - Statement of Intent, Preferred Land Uses and Plot Ratios and the Subiaco Redevelopment Authority's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to Lots 401, 402 and 421 located at the corner of Railway Road, Hay Street and Roberts Road as shown on Figure 1 – Centro Place Subdivision.

Relationship to Planning Scheme and General Planning Policies

The 'preferred' and 'potential' land uses for the Centro Avenue and Centro Place Commercial Area are detailed within clause 42 and 45 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Subiaco Redevelopment Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Subiaco Redevelopment Scheme and Policies.

Desired Character

The intent is to create a vibrant commercial/mixed-use area having the qualities of a traditional urban commercial precinct. The Roberts Road – Hay Street intersection is one of the landmark sites within the Centro Place commercial area. It is intended that the scale of development would gradually increase along Roberts Road from this intersection towards Centro Place itself.

Uses that would be appropriate within the Centro Place Precinct include: offices or other commercial buildings, entertainment facilities, and restaurants. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscapes that extend from Subiaco Square along Roberts Road and along Hay Street towards the intersection.

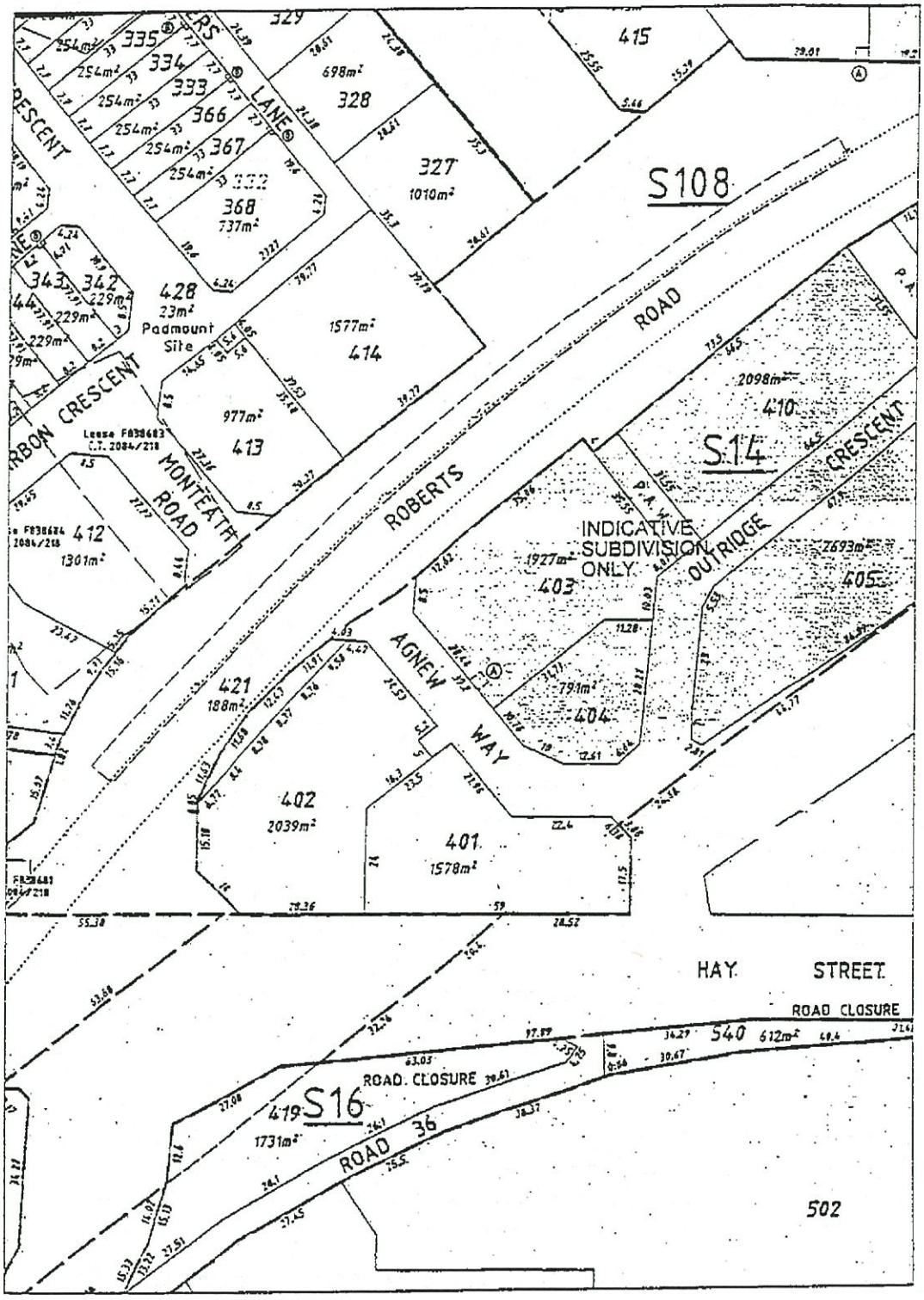


Figure 1 - Lots 401,402 and 421 Location Plan

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of

integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within a defined building envelope extending above and below the property boundaries with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows.

Lot 402 is perceived to be a prominent site and an entry to the Centro Place commercial area. For both Lots 401 and 402, the building envelopes shall have a minimum of two storeys with a maximum of three storeys. The maximum permitted eaves/parapet height above finished site level is 11.7m except for corner elements where the maximum height of the parapet is 13.7m. Development on these lots should sufficiently address the corners to which they front.

Lot 421 is affected by a number of tunnel related covenants and as a result development of this land may not be appropriate. However, the area of this lot may be used in the calculations of development on Lot 402. (See Appendix II for Lot 421 Encumbrances).

Lots 421 and 402 are to be sold together (as one parcel and will be seen as one parcel when calculating plot ratio for the site), however Lot 421 is affected by the railway tunnel running under Roberts Road. No development is permitted within the tunnel easement. Development of the remaining portion of Lot 421 is not precluded, however all structures should be independent of the tunnel and its 'zone of influence'. Should the developer wish to build within the 'zone of influence' then the requirements of Appendix II - Zone Of Influence Specifications, apply with respect to load limits.

Lot 421 and portions of Lots 401 and 402 are located within the railway tunnel buffer area. Development within this area must demonstrate compliance with the vibration and ground-borne noise criteria as set out in Appendix I – Buffer Area Performance Standards.

Building Setbacks

It is preferred that the majority of the buildings be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements.

Relationship to side (common) boundaries must consider access for natural light and ventilation. This may be approached by using atriums, courtyards and/or appropriate setbacks.

Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential.

Residential Density

The maximum residential density for development in this precinct is R80.

Building Form

It is anticipated that the majority of development will be for offices or other commercial floorspace. Individual buildings may have a number of different tenant spaces that may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's facade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting.

Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum awning height of 4.5 metres above the footpath is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards.

Lots 401 and 402 must address and reinforce the corners through the use of parapets, fenestration, entries or roof design.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, facades and parapet detailing.

Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading.

Roofs must have a minimum pitch of 30° and be constructed of clay or slate tiles or colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view from the public realm behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on Lots 401 and 402 must be obtained via Agnew Way.

Services

Developments on all lots have access to all urban services. All piped and wired services, air conditioners, hot water storage etc, should not be visible from the public realm.

Railway Tunnel Zone of Influence

Development on lots located adjacent to the rail tunnel which results in any load being applied within the zone of influence will be required to comply with the relevant specifications that pertain to the allowable loads on or near the tunnel from buildings founded in the 'Zone of Influence'. These specifications are summarised in Appendix II. A statement from a structural engineer confirming that these specifications have been met will be required at Building Application stage.

Buffer Area Performance Standards

Development on Lots located within 50m of the rail tunnel (see Figure 2) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendix I. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant, expert in the assessment of vibration and ground borne noise, confirming that the various standards have been met will be required to be lodged at Building Application stage.

APPENDIX I – BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[3]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

APPENDIX II – ZONE OF INFLUENCE SPECIFICATIONS

Allowable Loads at Tunnel Roof Level

Road (Parking Area) Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) Austroads 92 Loading:
  (1) T44 truck loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 16 kPa under each pair of axles; or
  (2) HLP 320 loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 20 kPa.

Building Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) building load:

Alternative Load Combinations	Load Type
(i) Blanket uniformly distributed load; or	20 kPa D.L. + 15 kPa L.L.
(ii) Point Load on 7.5m x 7.5m grid plus uniformly distributed load on adjacent area; or	6 kPa D.L. + 4 kPa L.L. + 1000 kN/m D.L. + 400 kN/m L.L.
(iii) Line load at 7.5m centres plus uniformly distributed load on adjacent area	6 kPa D.L. + 4 kPa L.L. + 130 kN/m D.L. + 70 kN/m L.L.

'Line' Loads to be distributed over a contact width of not less than 300mm.
'Point' Loads to be distributed over a contact area of not less than 1.0m x 1.0m.

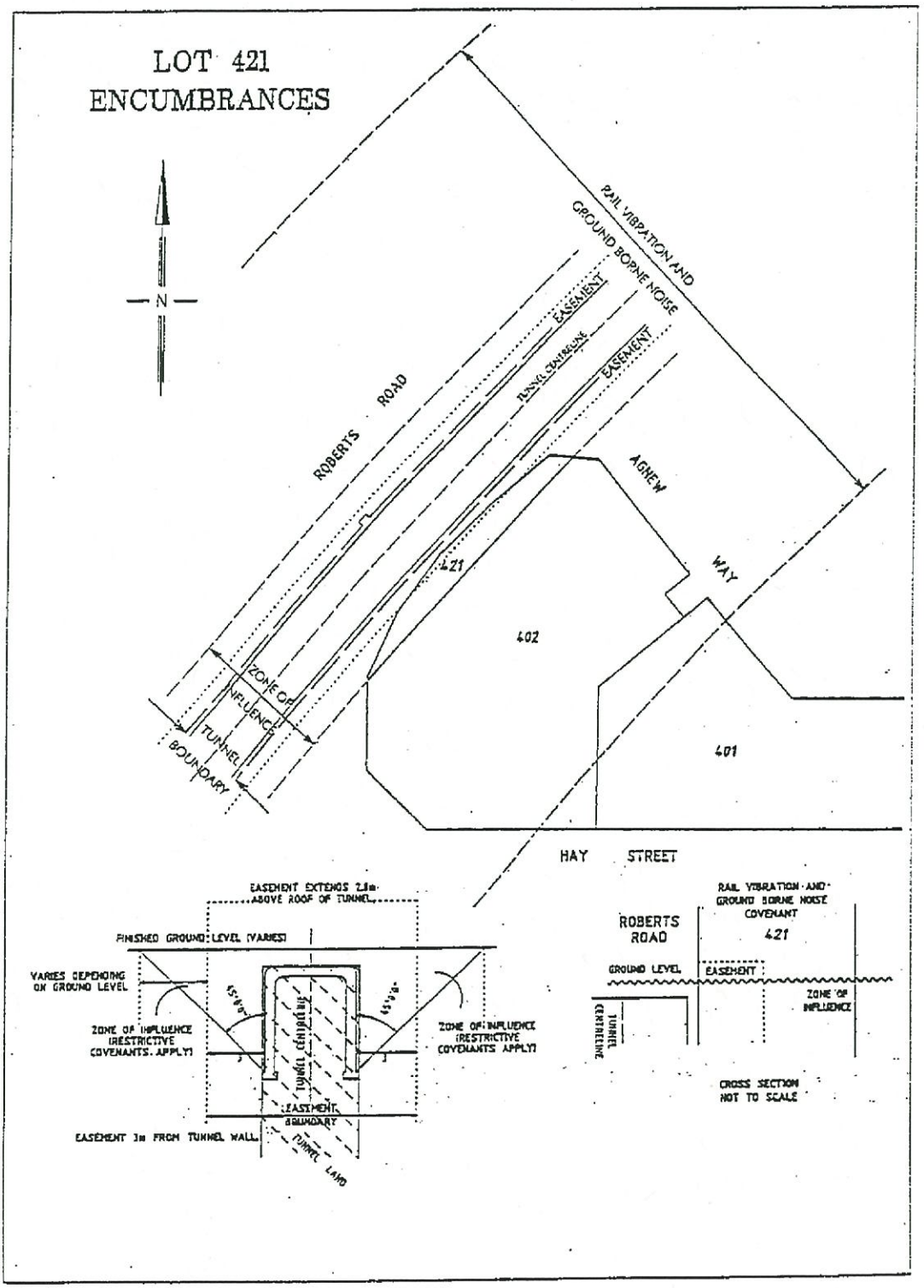


Figure 2 – Lots 401, 402 and 421 Encumbrances.

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 6
DESIGN GUIDELINES
(LOT 1401)

SUBIACO
REDEVELOPMENT
AUTHORITY

February 2002

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 6 DRAFT DESIGN GUIDELINES (LOT 1401 Parts A, B & C)

Context

Refer to the Subiaco Redevelopment Scheme Text - Statement of Intent. Preferred Land Uses and Plot Ratios and the Subiaco Redevelopment Authority's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply

Scope of the Guidelines

These draft Site Design Guidelines apply to Lot 1401 and its sublots A, B and C which are located between Roberts and Railway Roads northeast of Agnew Way as shown on Figure 1 – Centro Place Subdivision.

Relationship to Planning Scheme and General Planning Policies

The subject land is located within Precinct 3 'Centro Place' under the provisions of the Subiaco Redevelopment Scheme 1996 ("The Scheme"). The 'preferred' and 'potential' land uses for the Centro Avenue and Centro Place Commercial Area are detailed within Clause's 42 and 45 of the Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies appurtenant to the Scheme.

These guidelines are intended to supplement the provisions of the Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and Policies.

Desired Character

The intent is to create a vibrant commercial/mixed-use area having the qualities of a traditional urban commercial precinct. The Roberts Road – Centro Avenue intersection is one of the landmark sites within the Centro Place commercial area. It is intended that the scale of development would gradually increase along Roberts Road from Agnew Way towards Centro Place.

Development on Lot A will be the culmination of the Centro Avenue vista and will be one of the key entrance statements into the Subiaco Town Centre. Accordingly, this building must reflect a sense of quality and permanence in its façade.

Uses that would be most appropriate within the Centro Place Precinct include: offices, medical facilities, tourist accommodation, entertainment facilities, and restaurants or other commercial facilities. Some residential uses may also be considered. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular takes advantage of the specially designed streetscapes that extend from Subiaco Square along Roberts Road and along the

pedestrian access ways that extend from Roberts Road southwards to Railway Road and beyond to the Subiaco town centre.

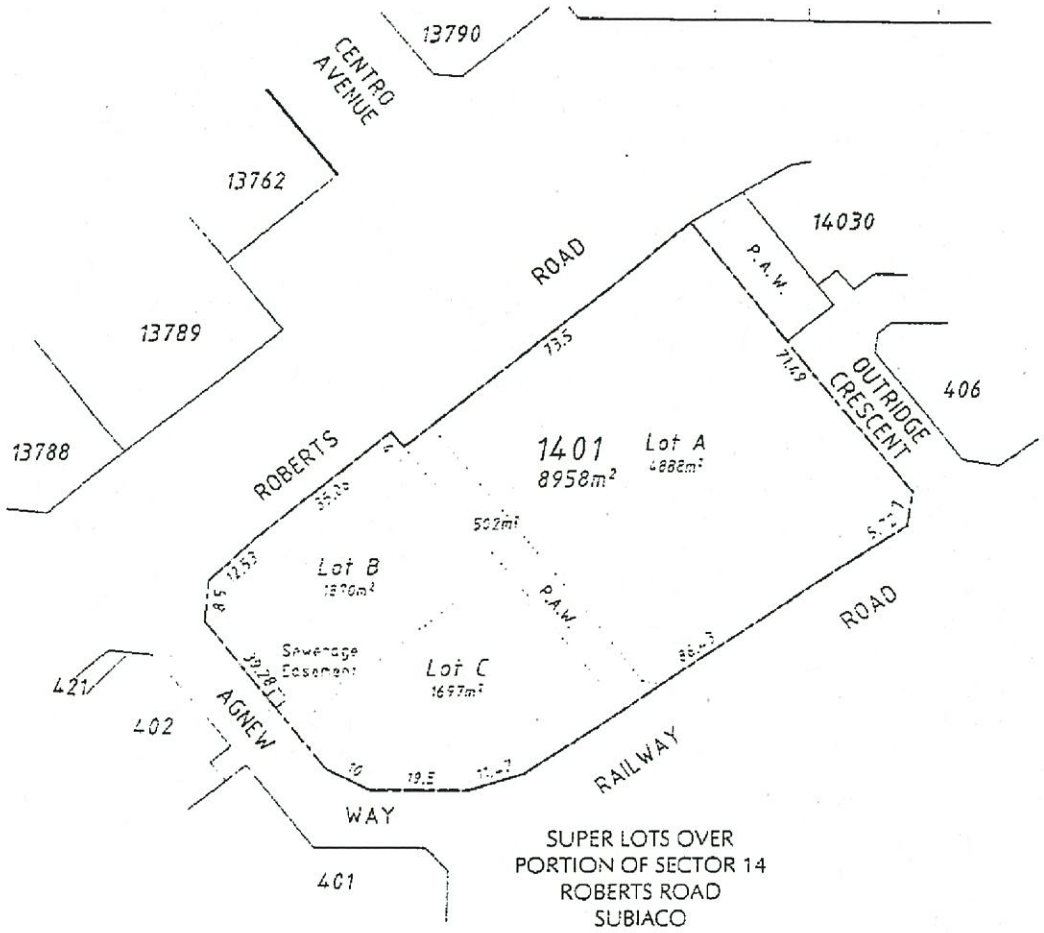


Figure 1 – Lot 1401 Location Plan

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include: detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within a defined building envelope extending above and below the property boundaries with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows.

Lot 1401 (A, B & C) is perceived to be one of the most prominent sites in the project area, with Lot A being the culmination of the Centro Avenue vista and centrepiece of the Centro Place commercial area. For all three lots, the building envelopes shall have a minimum of two storeys with a maximum of three storeys on Lots B & C and 5 storeys on Lot A. It should be noted that development on Lot A that fronts Railway Road should be limited to three storeys with an increase in height towards Roberts Road. The maximum permitted eaves/parapet height above finished site level for Lots B & C is 11.7m except for corner elements where the maximum height of the parapet is 13.7m. Development on Lot A is limited to 11.7m on the Railway Road frontage and 18.5m on the Roberts Road frontage.

Building Setbacks

It is preferred that the majority of the buildings be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There are no minimum side or rear setback requirements.

Relationship to side (common) boundaries must consider access for natural light and ventilation. This may be approached by using atriums, courtyards and/or appropriate setbacks.

Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential.

Residential Density

The maximum residential density for development in this precinct is R80.

Building Form

It is anticipated that the majority of development will be for offices or other commercial floorspace. Individual buildings may have a number of different tenant spaces that may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's facade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting.

Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings should have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum awning height of 4.5 metres above the footpath is permitted.

Development at the street or pedestrian level is to incorporate design elements that add interest to the street or pedestrian access way such as windows, areas of colonnading or courtyards.

Lots A and B must address and reinforce the corners through the use of parapets, fenestration, entries or roof design.

Buildings must have a vertical emphasis, reinforced by vertically proportioned windows, facades and parapet detailing.

Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural detail.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, fascias, gutters, parapet detailing or balustrading.

Roofs must have a minimum pitch of 30° and be constructed of clay terracotta tiles or light coloured colorbond. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view from the public realm behind a suitable parapet.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on Lot A must be via Railway Road and Lots B and C must be obtained via Agnew Way.

Services

The lots have access to all urban services. Piped and wired services, satellite dishes and aerials, air conditioners and hot water storage units etc, should not be visible from the public realm. It should be noted that some of these facilities require separate planning approval.

Buffer Area Performance Standards

Development on Lots located within 50m of the rail tunnel (see Figure 2) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendix I. The objective of the standards is to ensure that development is

constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant, expert in the assessment of vibration and ground borne noise, confirming that the various standards have been met will be required to be lodged at Building Application stage.

APPENDIX I – BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

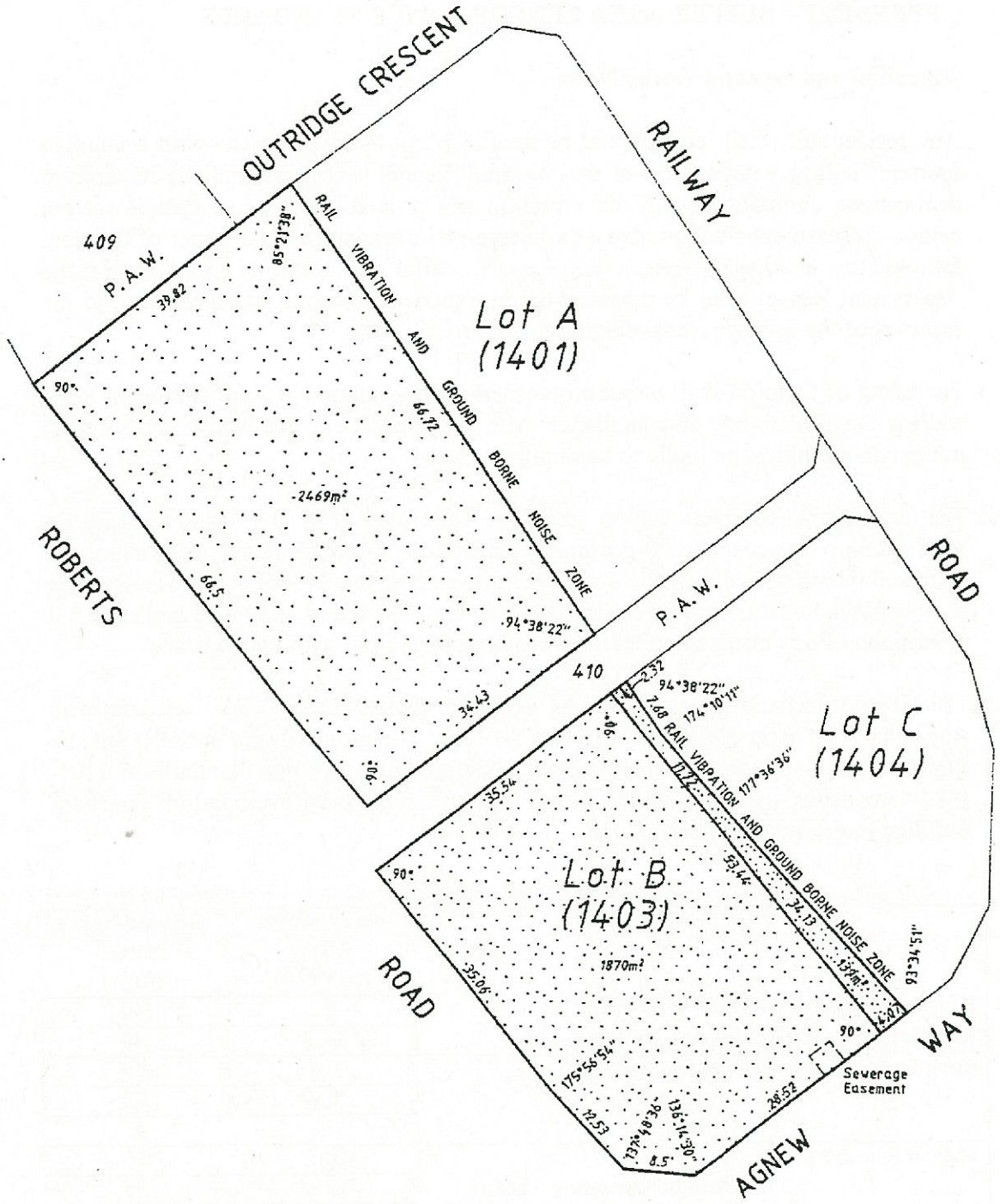
The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[3]	Refer to SRA[3]

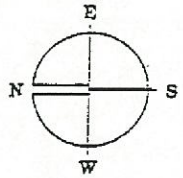
Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.



AREA SUBJECT TO RAIL VIBRATION AND GROUND BORNE NOISE CRITERIA

FIGURE 2 - LOT 1401 (A, B and C) ENCUMBRANCES



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CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 7 DESIGN GUIDELINES (LOTS 418, 419 and 420)

SUBIACO
REDEVELOPMENT
AUTHORITY

August 2002

CENTRO PLACE PRECINCT
CENTRO PLACE STAGE 7 DESIGN GUIDELINES (LOTS 418, 419 AND 420)

Context

Refer to the Subiaco Redevelopment Scheme Text - Statement of Intent, Preferred Land Uses and Plot Ratios and the Subiaco Redevelopment Authority's General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

The eastern portion of Lot 419 (refer Figure 1- Location Plan) is located outside the Subiaco Redevelopment Scheme Boundary. Any development proposed for this portion must obtain Planning Approval from the City of Subiaco. The City of Subiaco is not legally required to consider these guidelines or any requirement of the Subiaco Redevelopment Authority as part of their determination of any application. The City is, however, required to forward the application to the Western Australian Planning Commission for up to 30 days for comment prior to determining the proposal as the land is presently reserved under the Metropolitan Region Scheme as an 'Other Regional Road' and a 'Category 2' road under the 1997 Notice of Delegation.

Scope of the Guidelines

These Site Design Guidelines apply to Lots 418, 419 (within the Redevelopment Scheme Boundary) and 420 located at the corner of Railway Road and Hay Street as shown on Figure 1.

Relationship to Planning Scheme and General Planning Policies

The 'preferred' and 'potential' land uses for the Centro Place and Roberts Road Commercial Area are detailed within clause 42 and 45 of the Subiaco Redevelopment Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies.

These guidelines are intended to supplement the provisions of the Subiaco Redevelopment Scheme Text and Planning Policies and should be read in conjunction with those documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Subiaco Redevelopment Scheme and Policies.

Desired Character

The intent is to create a vibrant commercial/mixed-use area having the qualities of a traditional urban/commercial precinct. The Roberts Road/Hay Street intersection is one of the landmark sites within the Centro Place commercial area, being one of the main gateways into Subiaco.

Uses that would be appropriate within the Centro Place Stage 7 Precinct include offices or other commercial buildings, community facilities and residential uses. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular take advantage of the specially designed streetscapes that extend from Subiaco Square along Roberts Road and along Hay Street.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within a defined building envelope extending above and below the property boundaries with only minor projections allowed for such items as corner detailing, parapets, awnings, balconies or small portions of windows. Refer to plans 'Lot 419 and Lot 418 & 420 – Site Specific Guidelines' plans for details.

Lots 418 and 419 are perceived to be prominent sites that form an entry into Subiaco and the Centro Place commercial area. For both Lots 418 and 419, the building envelopes shall have a minimum of two storeys with a maximum of three storeys. The maximum permitted eaves/parapet height above finished site level is 11.7m except for corner elements where the maximum height of the parapet is 13.7m. Development on these lots should sufficiently address the corners to which they front. Such heights shall be measured from the existing footpath or road level immediately abutting the development.

The building envelope on Lot 419 shall be staggered to the rear to ensure that there is no overshadowing of the adjoining properties to the southeast at 21 June other than that cast by the existing dividing fence. The applicant will be required to demonstrate compliance with this requirement as part of any application for planning approval.

Lot 420 is affected by a number of tunnel related covenants and as a result development of this land is not appropriate. However, the area of this lot may be used in the plot ratio and density calculations of development on Lot 418. (See Appendix III for Lot 420 Encumbrances).

Lots 418 and 420 are to be sold together as one parcel and will be seen as one parcel when calculating plot ratio for the site, however Lot 420 is affected by the railway tunnel running under Hay Street. Development is generally precluded within the tunnel easement. Development of the any portion outside the easement is not precluded, however all structures should be independent of the tunnel and its 'zone of influence'. Should the developer wish to build within the 'zone of influence' then the requirements of Appendix III - Zone Of Influence Specifications, apply with respect to load limits.

Building Setbacks

It is preferred that the majority of the buildings be constructed to the front boundary with a setback of up to 3m being permitted where the Authority is satisfied it will not affect the continuity of the streetscape. There is no minimum side setback for either property and there is no minimum rear setback for Lot 418.

The development on Lot 419 must give due regard to the existing residential development abutting its southeastern boundary. No development shall cause a shadow as calculated on June 21 to be cast over this property greater than the shadow already cast by the existing fence. Refer to 'Lot 419 – Site Specific Guidelines Plan' for details.

Plot Ratio

A maximum plot ratio of 2:1 applies to the subject lots of which no more than 50% of the floorspace may be residential.

Residential Density

The maximum residential density for development in this precinct is R80.

Building Form

It is anticipated that the majority of development will be for offices or other commercial floorspace. Individual buildings may have a number of different tenant spaces that may be designed for different uses. Entrances to buildings must be distinct and clearly identifiable within the building's facade through the use of canopies (limited in depth to 3m), steps, recesses, building material changes and lighting.

Awnings are to be provided on all building facades adjacent to pedestrian paths. The awnings should have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awning is to extend a minimum 80% of the building's frontage to pedestrian paths. A maximum awning height of 4.5 metres above the footpath is permitted.

Development at the street level is to incorporate design elements that add interest to the street such as windows, change of materials, areas of colonnading or courtyards. Particular attention is to be afforded to the Railway Road street level abutting Lot 419 due to the change in street level. Landscaped car park ventilation grilles are not considered an appropriate design solution on their own.

The development on both Lots 418 and 419 must address and reinforce the corner through the use of parapets, fenestration, entries or roof design. The southwestern façades must also be designed to address Railway Road, as must the western façade of upper storeys of Lot 418. Lengths of featureless walls will not be permitted where they are visible from the public realm. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows, facades and parapet detailing.

The development of Lot 419 must not create the potential for overlooking into the private areas of adjoining residential properties. Methods such as greater setbacks on upper levels, highlight windows, obscure glazing and windows with a fixed or limited opening sash may be required for all windows that have the potential to allow for a privacy concern to arise. The applicant will be required to demonstrate how the privacy of any person using an adjoining or nearby courtyard property will be maintained.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details.

Windows must have a vertical orientation and ideally be recessed within the facade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, fascias, gutters, parapet detailing or balustrading.

Roofs must either have a minimum pitch of 30° and be constructed of clay or slate tiles or light shades of colorbond, or have a lesser pitch/flat profile that must be hidden from view from the public realm behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall comply with the standards as set within the Subiaco Redevelopment Scheme.

Access to car parking/service areas on Lot 418 must be near its southern most boundary onto Railway Road. The access to the parking/service area appurtenant to the development on Lot 419 must be obtained via a laneway at the rear of the property that will connect with Hay Street. To ensure that this laneway is constructed to a level and length to accommodate the proposed development and is not damaged during construction, the Authority will pay for (and/or construct) the construction of this laneway once the development on Lot 419 is nearing completion.

The development of Lot 419 must provide for a vehicle turnaround area accessed from the laneway.

Services

Developments on all lots will have access to all urban services. A financial allowance has been made for the provision of a Western Power transformer. The developer must make allowance for the installation of the transformer within the development of the site. Such transformer must be screened from view from the public realm and meet the requirements of Western Power. The developer is encouraged to make their own investigations with the Authority to ascertain the amount of the financial allowance and to ascertain and ensure compliance with any Western Power requirement.

All piped and wired services, air conditioners, hot water storage etc, should not be visible from the public realm, or located in areas where their noise and appearance has the potential to adversely impact on the amenity of adjoining residents.

Allowance must be made to a bin storage area suitable to accommodate all waste receptacles required to service the development. Such bin storage area must be provided with water wash down facilities and connected to the main sewerage network. The development on Lot 419 must give due consideration to its location to minimise its potential impact on the amenity of the adjoining residents both in terms of odour and to minimise noise on collection days. Investigations need to be made with the City of Subiaco to ensure appropriate provision is made for the removal of the waste receptacles.

Risk of Flooding

The low portions of Lot 419 and Lot 418 abutting Railway Road may be subject to flooding in the 1 in 100 year storm event. The Water Corporation has reviewed the capacity of the main drain for the 1 in 100 year storm event and discovered that there was a risk of flooding in a number of areas in significant storm events (e.g. if the main drain was to fail and back flow into Council's drainage system.) Whilst the extent of any flooding should be minimal all developers are advised to contact the Authority for more detail in this regard so that it can be taken into account during the design of the buildings.

Railway Tunnel Zone of Influence

Development on lots located adjacent to the rail tunnel which results in any load being applied within the zone of influence will be required to comply with the relevant specifications that pertain to the allowable loads on or near the tunnel from buildings founded in the 'Zone of Influence'. These specifications are summarised in Appendix III. A statement from a structural engineer confirming that these specifications have been met will be required at Building Application stage.

Buffer Area Performance Standards

Development on lots located within 50m of the rail tunnel (see attached 'Encumbrances Plans') are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendices I and II. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant(s) and certified engineer, expert in the assessment of vibration and ground borne noise and expert assessment of air borne noise confirming that the various standards have been met will be required to be lodged at Building Application stage. See attached plans and appendices.

Construction Adjacent To The Railway

Due care and consideration must be afforded to the railway tunnel during the construction of development on Lot 418. All construction personnel must be informed of the location of the tunnel and that no cranes or other heavy vehicles with a load in excess of Austroads 92 T44 truck loading or HLP 320 loading should park or operate within 10 metres of the railway tunnel centre line. The Authority or the City of Subiaco accept no liability for any damage or injury caused as a result of failing to ascertain or comply with the tunnel's load capacity specifications.

APPENDIX I – BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[1]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

APPENDIX II - BUFFER AREA PERFORMANCE STANDARDS

Air Borne Noise

1. Residential

(a) For train noise, the developer is required to comply with an internal LAmax of 45dB(A). (As determined from the Department of Environmental Protection – Draft Impact Policy for Road and Rail Transportation Noise, dated 10/11/97) in respect of all residential developments on the Land.

(b) Within the 65dB(A) noise contour, train noise received at a residential premises comprised the Land may exceed the internal design criteria depending on the nature of the Building construction. Developers are required to obtain an acoustical consultants report demonstrating that the Buildings construction adequately attenuates noise emissions from suburban passenger trains travelling at speeds of up to and including 90km/hr and that the Lamax internal noise will be less than 45dB(A).

(c) Outside the 65dB(A) noise contour, internal noise levels would be acceptable with normal building construction. For residential buildings comprised in the Land requiring a specific acoustical environment, it is recommended that the developer obtains advice from an acoustic consultant as to the adequacy of the proposed building construction.

(d) In all cases, when developing the Land for the purposes of residential premises developers need to satisfy themselves that the above criteria are still appropriate and have not been superseded by the requirements of any Relevant Authority. Where the criteria have been superseded, the last standard or criterion shall be used in the design as is applicable at the date on which the relevant approval required from a Relevant Authority to the construction of any residential Buildings is obtained by the developer.

2. Commercial

(a) For train noise, in relation to any Buildings constructed on the Lots for a commercial purpose, the developer must comply with an internal noise level of:

(1) 55dB(A) (as determined from the Department of Environmental Protection - Draft Impact Policy for Road and Rail Transportation Noise, dated 10/11/97); or

(2) the maximum recommended design sound level listed in Table 1 of AS2107-1987 plus 10dB(A).

(b) Within the 70dB(A) noise contour, train noise received at a commercial Building on the Lots may exceed the internal design criteria depending on the nature of the Building construction. The developer is required to obtain an Acoustical Consultant's report demonstrating that the Building's construction can achieve the required internal noise level emanating from suburban passenger trains travelling at speeds of up to and including 90km/hr.

(c) Outside the 70dB(A) noise contour, internal noise levels would be acceptable with normal Building constructions. However, for commercial Buildings on the Lots requiring a specific acoustical environment, it is recommended that the developer obtain advice from an Acoustical Consultant as to the adequacy of the proposed Building construction for the intended use

(d) In all cases relating to commercial Buildings, the developer needs to satisfy itself that the above criteria are still appropriate and have not been superseded by the requirements of any Relevant Authority. Where the criteria have been superseded, the last standard or criterion shall be used in the design as is applicable at the date on which thc relevant approval required from a Relevant Authority to the construction of any commercial Buildings is obtained by the developer.

APPENDIX III – ZONE OF INFLUENCE SPECIFICATIONS

Allowable Loads at Tunnel Roof Level

Road (Parking Area) Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) Austroads 92 Loading:
  (1) T44 truck loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 16 kPa under each pair of axles; or
  (2) HLP 320 loading when dispersed through the 1000 deep backfill/pavement. This is approximately equivalent to a U.D.L. of 20 kPa.

Building Loading

(a) 20 kPa (allowance for 1 metre of compacted backfill or pavement) plus;
(b) building load:

Alternative Load Combinations	Load Type
(i) Blanket uniformly distributed load; or	20 kPa D.L. + 15 kPa L.L.
(ii) Point Load on 7.5m x 7.5m grid plus uniformly distributed load on adjacent area; or	6 kPa D.L. + 4 kPa L.L. + 1000 kN/m D.L. + 400 kN/m L.L.
(iii) Line load at 7.5m centres plus uniformly distributed load on adjacent area	6 kPa D.L. + 4 kPa L.L. + 130 kN/m D.L. + 70 kN/m L.L.

'Line' Loads to be distributed over a contact width of not less than 300mm.
'Point' Loads to be distributed over a contact area of not less than 1.0m x 1.0m.

CENTRO PLACE PRECINCT

CENTRO PLACE STAGE 8 DESIGN GUIDELINES (LOTS 101 TO 105, 35, 36 & 40 HOOD & STATION STREETS)

SUBIACO
REDEVELOPMENT
AUTHORITY

October 2002

PRECINCT 3 – CENTRO PLACE PRECINCT STAGE 8

DESIGN GUIDELINES (FOR LOTS 101 TO 105, 35, 36 AND 40 HOOD AND STATION STREETS, SUBIACO)

Context

Refer to the Subiaco Redevelopment Authority Scheme 1996 ('the Scheme') Statement of Intent, Preferred Land Uses and Plot Ratio's and the General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to Lots 101 to 105, 35, 36 and 40 on Hood and Station Streets east of Vickers Lane and south of Hood Street, Subiaco as shown on Figure 1 – Location Plan.

Relationship to Planning Scheme and General Planning Policies

The 'Preferred' and 'Potential' land uses for Precinct 3 – Centro are detailed within Clauses 42 and 45 of the Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies appurtenant to the Scheme.

These guidelines known as the 'Centro Place Precinct Stage 8 Design Guidelines' are a Design Manual prepared and adopted pursuant to Part 5 of the Subiaco Redevelopment Scheme 1996.

These guidelines are intended to supplement the provisions of the Scheme and Planning Policies and should be read in conjunction with these documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and appurtenant policies.

Desired Character

The intent is to create a vibrant mixed-use development area having the qualities of a traditional urban commercial precinct. The land covered by these guidelines links Subiaco Gardens and the Centro Place commercial area with Subiaco Square. It is intended that a similar scale to that of development along Centro Avenue would continue along Hood Street leading up to the mixed development area of Subiaco Square.

Uses that are appropriate within this precinct include offices, mixed-use commercial/residential developments, serviced apartments, entertainment facilities and restaurants. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular provides a lively connection between Station Square and Centro Avenue.

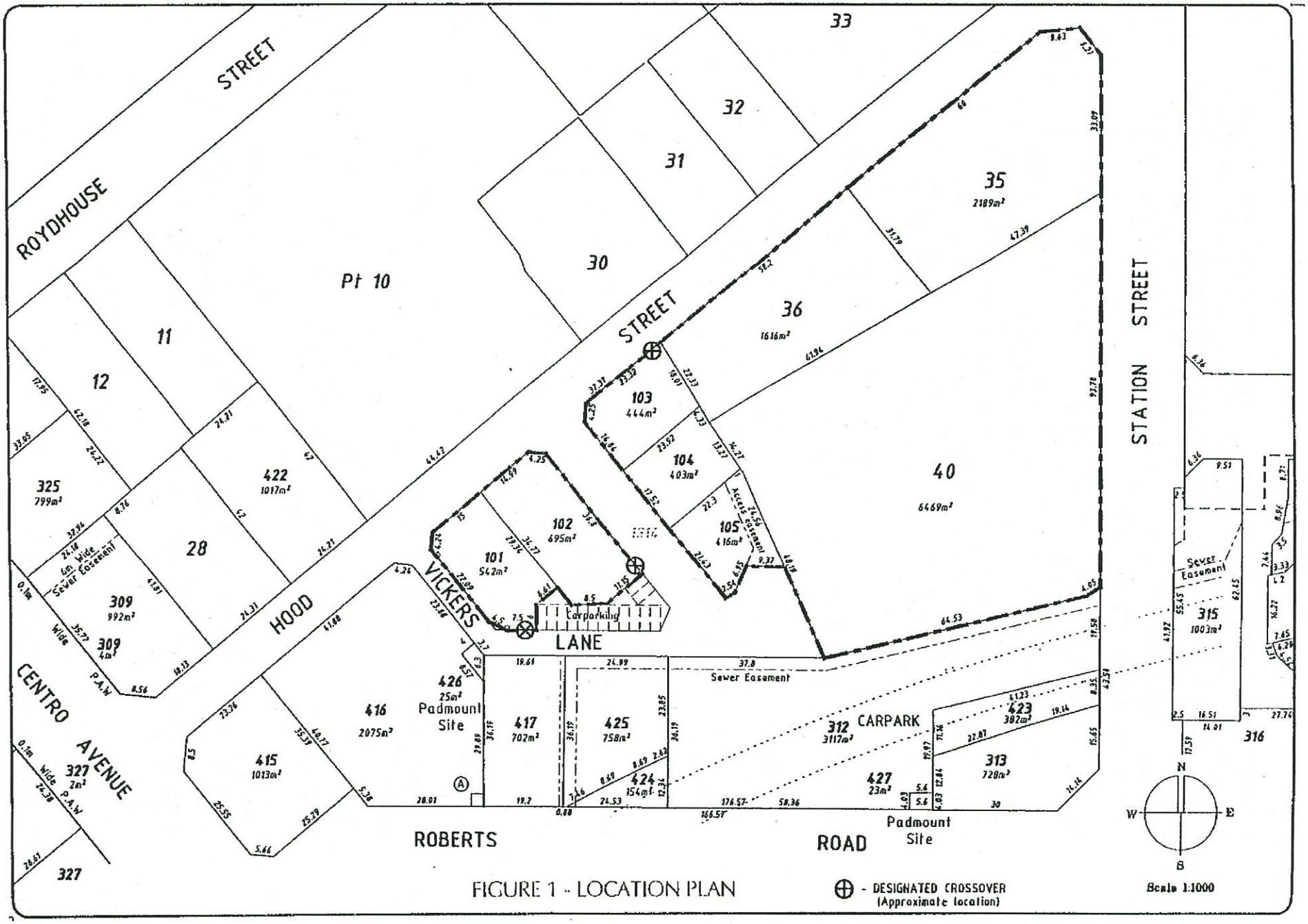


FIGURE 1 - LOCATION PLAN

⊕ - DESIGNATED CROSSOVER (Approximate location)

Building Envelope

The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, and balconies. Balcony's should not protrude beyond the confines of the property unless the Department of Land Administration and/or, the Western Australian Planning Commission has given a written commitment to support their construction and future tenure arrangement.

All lots have a minimum building envelope requirement of two storeys.

Lots 101, 102, 36 and the majority of the Hood Street frontage to Lot 35 shall only be permitted to have a third storey provided it is setback a minimum of five metres from the property boundary abutting Hood Street. For the front five metres of such lots (or portions thereof) the maximum permitted eaves/parapet height above the finished site level is 8.5 metres. For the remainder of such lots the maximum building envelope is three storeys with a maximum permitted eaves/parapet height of 11.7 metres.

The very eastern portion of Lot 35 may have a third storey and in any event is required to have a corner statement abutting the corner of Hood and Station Streets where the maximum permitted eaves/parapet height is 13.7 metres.

Lot 40 abuts a car park on its southern boundary. Whilst currently this car park is only on the ground level, there is the potential in the longer term for this car park to be multi storey. The maximum building envelope for Lot 40 is three storeys with the exception of the third storey abutting the car park and the portion of Lot 40 abutting Vickers Lane near the southwest corner of the site where the third storey shall again be setback five metres from the relevant property boundary.

All heights shall be measured from the footpath/verge level immediately abutting the property boundary. In the case of Lot 40, the developer is encouraged to lower the site level to that of Station Street. In any event the developer will be required to demonstrate that a pedestrian friendly interface is provided between the development and the Station Street footpath.

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to three metres being permitted where the Authority is satisfied that it will not affect the continuity of the streetscape. As previously stated, there is, however a five metre setback to any third storey abutting the car park, Vickers Lane and Hood Street with the exception of the eastern portion of the Hood Street frontage to Lot 35 where the third storey is encouraged to abut the property boundary.

There are no minimum side or rear setback requirements where a property abuts another development site, excluding the setback to Lot 40 where it abuts the car park on its southern boundary. A greater setback to the southern boundary of Lot 40 is permitted to allow for the development to address and overlook the car park.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. Natural light and ventilation may be achieved through the use of atriums, courtyards and/or appropriate setbacks.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

As previously stated, the car park abutting the southern boundary of Lot 40 has the potential to contain a multi storey car park, but such a development is unlikely in the short term. Should Lot 40 be developed with a two storey portion abutting its southern and southwestern boundary where no windows or substantial articulation is proposed then the developer shall be required to install public art on the boundary wall. The public art shall be substantial, durable and in keeping with the character and amenity of the area. The requirement for the artwork will be imposed as a conditional of any planning approval, with the actual detail of such artwork to be provided to the Authority at the time of working drawings for approval.

Plot Ratio

A maximum plot ratio of 2.0:1 applies to the subject lots of which no more than 50% may be residential. A development with more than 50% of its plot ratio dedicated to a residential use then the maximum plot ratio shall be limited to 1:1.

Residential Density

The maximum residential density for development in this precinct is R80. The density bonuses outlined by the Residential Planning Codes such as for single bedroom dwellings can be considered by the Authority.

Residential Development Standards

Any development proposing to contain a residential component will need to satisfy the residential development requirements specified by Planning Policy 1.4 'Residential Development' including those provisions relating to privacy and open space.

Building Form

It is anticipated that the majority of developments will be for mixed uses comprising offices/commercial floorspace at ground level with residential floorspace located on upper floors. Individual buildings may have a number of different tenant spaces that may be designed for different uses.

All buildings must address the street to which they front onto. Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards. Entrances to buildings must be distinct and clearly identifiable within the building's façade through the use of canopies (limited in depth to three metres), steps, recesses, building material changes and lighting.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows and façades.

Building façades are to be highly detailed to ensure that they make a positive contribution towards the character and amenity of the streetscape. This can be achieved by the provision of building elements such as deep window reveals, exposed window sills, building elements with varied setbacks, detailing of parapets, detailed balustrading and the use of varied building materials. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Lengths of featureless walls will not be permitted where they are visible from the public realm.

Awnings are to be provided above the ground floor of all commercial building facades adjacent to pedestrian paths. These awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awnings are to extend a minimum of 80% of the building's frontage to pedestrian paths abutting Station Street and 50% of the building's frontage abutting Hood Street. A maximum awning height of 4.5 metres is permitted.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details. The extensive use of concrete tilt-up panels on building façades is not permitted.

Windows must have a vertical orientation and ideally be recessed within the façade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading. All remaining façade colours should be generally 'light' colours that compliment the existing modern developments to the satisfaction of the Authority.

Roofs must have a minimum pitch of 30 degrees and be constructed of traditional terracotta clay (marseille style) tiles or the lighter shades of 'colorbond' colours. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

As a minimum, any exposed portion of a parapet wall must be treated and/or painted in the same manner as the facades of the dwelling.

Car Parking and Access

All car parking shall comply with the standards as set out within the Redevelopment Scheme.

Access to Lots 102 to 105 shall be via the dedicated crossovers as indicated by the Location Plan 'Figure 1'. Access to Lots 35, 36 and 40 shall be designed to give due regard to existing landscaping, on street car parking and streetscape works. Any access proposed to be gained via Station Street or Hood Street in close proximity to Station Street will need to be supported by an appropriate Traffic Study from a certified Traffic Engineer.

Services

All developments are to have access to all urban services. All piped and wired services, air conditioners, hot water storage systems etc should not be visible from the public realm.

Buffer Area Performance Standards

Development on lots located within 50m of the rail tunnel (see Figure 2) are required to comply with the 'Buffer Area Performance Standards', which are detailed in Appendices I and II. The objective of the standards is to ensure that development is constructed in such a way as to reduce any likelihood of noise and vibration affecting commercial activities or dwellings.

A statement from an acoustical consultant(s) and certified engineer, expert in the assessment of vibration and ground borne noise and expert assessment of air borne noise confirming that the various standards have been met will be required to be lodged at Building Application stage. See attached plans and appendices.

Construction Adjacent To The Railway

Due care and consideration must be afforded to the railway tunnel during the construction of development on Lot 40. All construction personnel must be informed of the location of the tunnel and that no cranes or other heavy vehicles with a load in excess of Austroads 92 T44 truck loading or HLP 320 loading should park or operate within 10 metres of the railway tunnel centre line. The Authority or the City of Subiaco accept no liability for any damage or injury caused as a result of failing to ascertain or comply with the tunnel's load capacity specifications.

APPENDIX I – BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground-Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application			Maximum VDV ($m/s^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential – Day (7.00am – 11.00pm)			0.2	40
Residential – Night (11.00pm – 7.00am)			0.13	40
Commercial	-	General Retail	0.4	60
	-	Prestige Retail	0.4	50
	-	Office etc	0.4	45
Special Purpose	-	Hospital Ward	0.13	35
	-	Hospital Operating Theatre	0.13[2]	35
	-	Other	Refer to SRA[1]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

APPENDIX II - BUFFER AREA PERFORMANCE STANDARDS

Air Borne Noise

Air Borne Noise

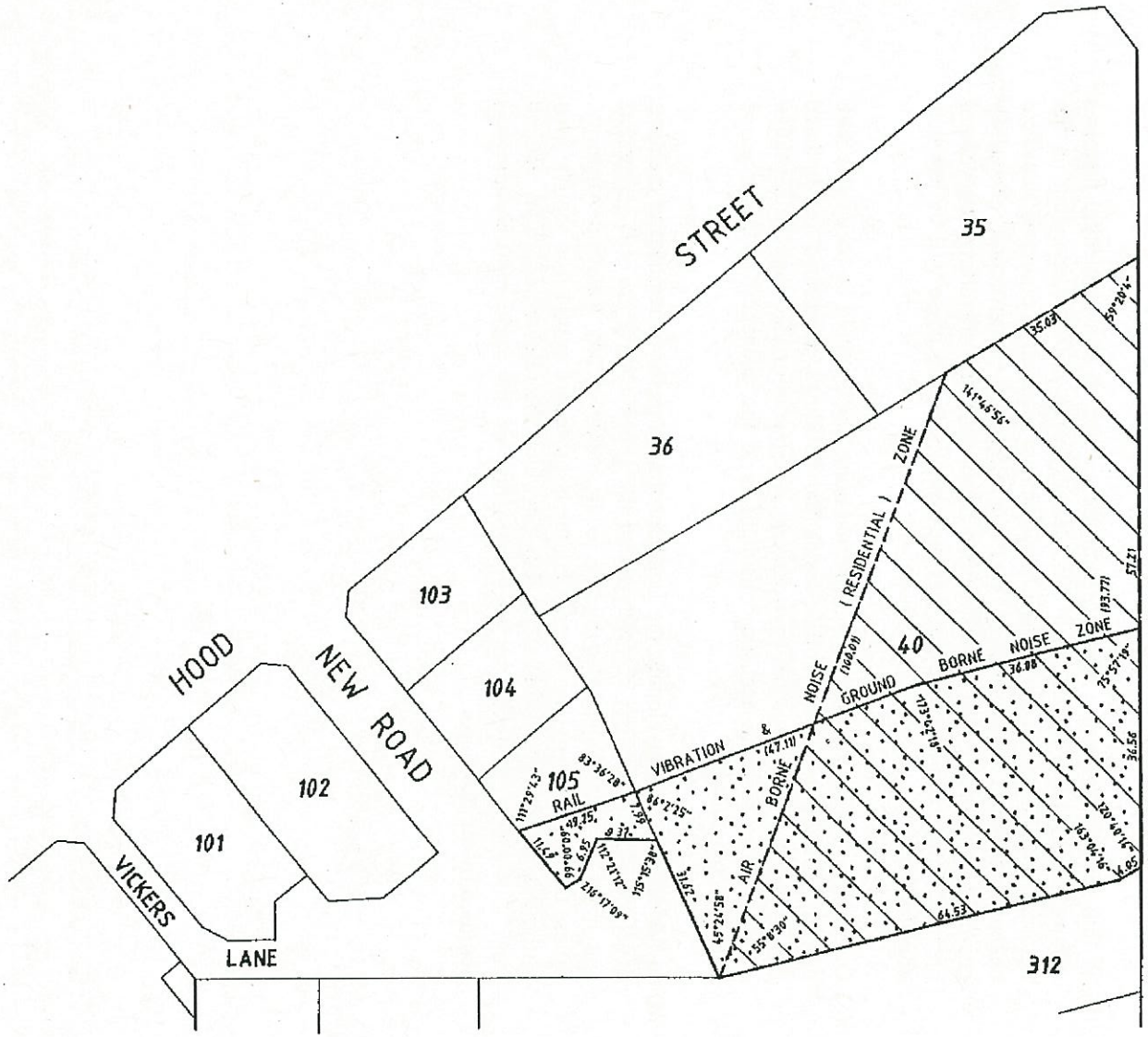
1. **Residential**

   (a) For train noise, the developer is required to comply with an internal LAmax of 45dB(A). (As determined from the Department of Environmental Protection – Draft Impact Policy for Road and Rail Transportation Noise, dated 10/11/97) in respect of all residential developments on the Land.

   (b) Within the 65dB(A) noise contour, train noise received at a residential premises comprised the Land may exceed the internal design criteria depending on the nature of the Building construction. Developers are required to obtain an acoustical consultants report demonstrating that the Buildings construction adequately attenuates noise emissions from suburban passenger trains travelling at speeds of up to and including 90km/hr and that the Lamax internal noise will be less than 45dB(A).

   (c) Outside the 65dB(A) noise contour, internal noise levels would be acceptable with normal building construction. For residential buildings comprised in the Land requiring a specific acoustical environment, it is recommended that the developer obtains advice from an acoustic consultant as to the adequacy of the proposed building construction.

   (d) In all cases, when developing the Land for the purposes of residential premises developers need to satisfy themselves that the above criteria are still appropriate and have not been superseded by the requirements of any Relevant Authority. Where the criteria have been superseded, the last standard or criterion shall be used in the design as is applicable at the date on which the relevant approval required from a Relevant Authority to the construction of any residential Buildings is obtained by the developer.



AREA SUBJECT TO AIR BORNE NOISE (RESIDENTIAL) CRITERIA

AREA SUBJECT TO RAIL VIBRATION AND GROUND BORNE NOISE CRITERIA

Maps Ref : 91780-815a

FIGURE 2 - LOTS 35-36, 40 & 101-105 ENCUMBRANCES

N
W
E
S

Scale 1 : 1000

ROYDHOUSE STREET PRECINCT

DESIGN GUIDELINES (LOTS BOUND BY CENTRO AVENUE, ROYDHOUSE, HOOD AND STATION STREETS)

1

SUBIACO
REDEVELOPMENT
AUTHORITY

July 2001

PRECINCT 2 - ROYDHOUSE

DESIGN GUIDELINES (FOR LAND BOUND BY CENTRO AVENUE, ROYDHOUSE, HOOD AND STATION STREETS)

Context

Refer to the Subiaco Redevelopment Authority Scheme 1996 ('the Scheme') Statement of Intent, Preferred Land Uses and Plot Ratio's and the General and Precinct Planning Policies. Where guidelines do not cover a specific aspect of development, the general planning policies apply.

Scope of the Guidelines

These Site Design Guidelines apply to all lots within land bound by Centro Avenue, Roydhouse, Hood and Station Streets as shown on Figure 1 – Location Plan. These guidelines supercede the "Roydhouse Precinct 2 Design Guidelines for Lots 28 & 422 Hood Street)" and "Centro Avenue Site Design Guidelines Lots 309, 325, 326, & 328 to 331 (September 1998)"

Relationship to Planning Scheme and General Planning Policies

The 'Preferred' and 'Potential' land uses for Precinct 2 – Roydhouse are detailed within Clauses 42 and 44 of the Scheme. General Policies and Precinct Planning Policies applicable to this area are outlined in the Planning Policies appurtenant to the Scheme.

These guidelines are intended to supplement the provisions of the Scheme and Planning Policies and should be read in conjunction with these documents. In determining any application for planning approval the Authority will have regard to these guidelines, the Scheme and appurtenant policies.

Desired Character

The intent is to create a vibrant mixed-use development area having the qualities of a traditional urban commercial precinct. The land covered by these guidelines links Subiaco Gardens and the Centro Place commercial area with Subiaco Square. It is intended that a similar scale to that of development along Centro Avenue would continue along Hood and Roydhouse Streets leading up to the mixed development area of Subiaco Square.

Uses that are appropriate within this precinct include offices, mixed-use showroom/commercial buildings, commercial/residential developments, entertainment facilities and restaurants. The emphasis is on creating street level development that incorporates active, pedestrian friendly frontages and in particular provides a lively connection between Station Square and Centro Avenue/Harborne Street.

Integration of Art

Involvement of artists in designing the new development is strongly encouraged as it can provide opportunities to enrich design responses. Some preferred methods of integrating artworks into the development include detailing to walls, steps, balustrading, paving, lighting, awnings and entry treatments.

Building Envelope

The building height and bulk shall be contained within the defined building envelope with only minor projections allowed for such items as corner detailing, parapets, awnings, and balconies. Any balcony that protrudes beyond the confines of the property will, however, require the approval of the Department of Land Administration and the City of Subiaco in addition to the Authority's approval.

All lots excluding Lots 1 and 34 Station Street have a building envelope requirement of two storeys within five metres of the front property boundary with only a loft being permitted above the second storey within this five metre setback. The maximum permitted eaves/parapet height above the finished site level within the five metre setback is 8.5 metres. A third storey up to a maximum eaves/parapet height of 11.7 metres is only permitted where it is setback a minimum of five metres from the front property boundary.

Lots 1 and 34 Station Street shall be perceived to be the entry into the precinct. Development on these lots shall be a minimum of two storeys, maximum of four storeys and shall address the corners to which they front. The maximum permitted eaves/parapet height is 15.2 metres with the maximum height of the parapet on the corner elements being 16.7 metres.

Building Setbacks

It is preferred that the majority of the building be constructed to the front boundary with a setback of up to three metres being permitted where the Authority is satisfied that it will not affect the continuity of the streetscape. As previously stated, there is, however a five metre setback to any third storey abutting Roydhouse and Hood Streets.

There are no minimum side or rear setback requirements.

Relationship to rear and side (common) boundaries must consider access for natural light and ventilation. Natural light and ventilation may be achieved through the use of atriums, courtyards and/or appropriate setbacks.

Plot Ratio

A maximum plot ratio of 1.0:1 applies to the subject lots. The maximum plot ratio may be increased to 1.5:1 provided that in any development having a plot ratio in excess of 1.0 not less than 50% of the excess relevant floor area shall be dedicated to residential use.

Residential Density

The maximum residential density for development in this precinct is R80.

Building Form

It is anticipated that the majority of developments will be for mixed uses comprising offices/commercial floorspace at ground level with residential floorspace located on upper floors. Individual buildings may have a number of different tenant spaces that may be designed for different uses.

All buildings must address the street to which they front onto. Development at the street level is to incorporate design elements that add interest to the street such as windows, areas of colonnading or courtyards. Entrances to buildings must be distinct and clearly identifiable within the building's façade through the use of canopies (limited in depth to three metres), steps, recesses, building material changes and lighting.

Buildings must have a vertical emphasis, reinforced by vertically orientated windows and façades.

Building façades are to be highly detailed to ensure that they make a positive contribution towards the character and amenity of the streetscape. This can be achieved by the provision of building elements such as deep window reveals, exposed window sills, building elements with varied setbacks, detailing of parapets, detailed balustrading and the use of varied building materials. Minor recessed panel detailing within tilt-up wall panels is not considered to be an acceptable design solution in itself.

Lengths of featureless walls will not be permitted where they are visible from the public realm.

Awnings are to be provided above the ground floor of all commercial building facades adjacent to pedestrian paths. These awnings must have a minimum depth of 2.7 metres and maximum depth of 3.0 metres. The awnings are to extend a minimum of 80% of the building's frontage to pedestrian paths abutting Station Street and Centro Avenue and 50% of the building's frontage abutting Hood and Roydhouse Streets. A maximum awning height of 4.5 metres is permitted.

Colours and Materials

Walls must be predominantly masonry or render with areas of alternate materials to highlight architectural details. The extensive use of concrete tilt-up panels on building façades is not permitted.

Windows must have a vertical orientation and ideally be recessed within the façade. Dark tinted or reflective glass is not permitted.

Accent colours should be used to shade trim, facias, gutters, parapet detailing or balustrading. All remaining façade colours should be generally 'light' colours that compliment the existing modern developments to the satisfaction of the Authority.

Roofs must have a minimum pitch of 30 degrees and be constructed of traditional terracotta clay (marseille style) tiles or the lighter shades of 'colorbond' colours. Lesser pitched roofs and flat profile metal decking is not permitted unless hidden from view behind a suitable parapet.

Satellite dishes, aerials, airconditioners or other roof-mounted plant must not be able to be seen from the public realm. It should be noted that some of these facilities require separate planning approval.

Development approval for any advertising structures or signage must be applied for separately at the time of lodging a development application. See the Authority's Signage Policy for details.

Car Parking

All car parking shall comply with the standards as set out within the Redevelopment Scheme.

Services

All developments are to have access to all urban services. All piped and wired services, air conditioners, hot water storage systems etc should not be visible from the public realm.

SUBI CENTRO
a place for all

JONES
COULTER
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Subi Centro Station Square
DESIGN GUIDELINES

REVISED EDITION

SUBIACO REDEVELOPMENT AUTHORITY
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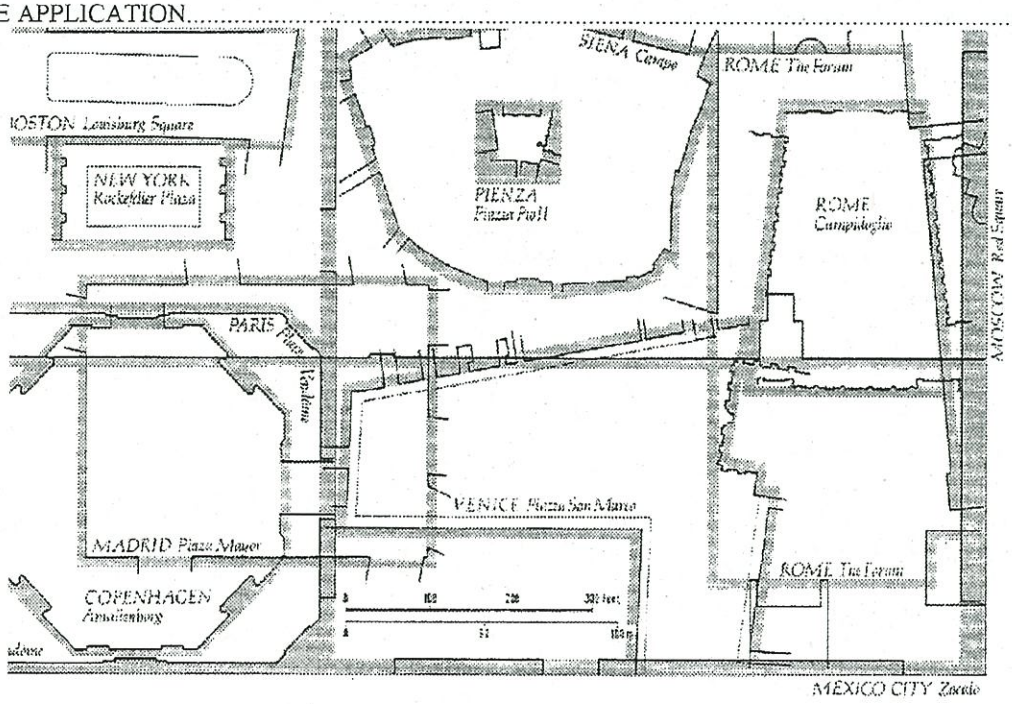
STATION SQUARE DESIGN GUIDELINES



Twelve city squares to scale

Station Square

1. GENERAL SITE INFORMATION

View from entrance of Station Square up Rokeby Road.

1.1 INTRODUCTION

The Subiaco Redevelopment Authority is redeveloping an 80ha site in the established and lively inner Perth suburb of Subiaco. The project is known as Subi Centro. The establishment of a new underground railway station and tunnel in Subiaco as part of this project will provide significant opportunities and benefits to Subiaco. The barrier that separates Subiaco from Daglish, Wembley and Jolimont will be removed resulting in an expanded catchment for retail and commercial services. Station Square will be the centrepiece of Subi Centro.

The information contained in this document relates to all lots (see sections 1.0 and 2.0). In addition, some detail on Lot 1 is provided in Section 3.0.

Qualities and the character of Station Square and it's adjacent buildings will:

- include a strong, defined appropriate termination to Rokeby Road, with key land uses focussing on the square;
- enable free and easy access for pedestrians, the disabled and vehicles, in some areas on shared surfaces;
- provide clear open space for public gatherings;
- provide smaller, intimate spaces;
- utilise simple, strong and durable quality materials;
- incorporate a number of established trees;
- provide appropriate microclimate control;
- provide a secure environment through generally open character;
- add vibrant, mixed use focus to the project especially at ground floor level; and
- provide a range of uses and forms complimenting Rokeby Road and Hay Street.

It should be noted that the design of the roads and parking within the square is conceptual at this time, with further detailed design development to be undertaken prior to settlement on the lots. Tenderers should also be aware that the Square is to be one of the City's prime civic spaces and will perform a number of public uses. A protocol of use is to be developed between the SRA and the City of Subiaco whereby the eventual use of the square, how it is to be managed and operated and its functions are established. One likely scenario is that the southern access roads within the square including the access off Roberts Road may be closed to vehicular traffic at regular intervals, such as Sundays, festivals or during major events at Subiaco Oval.

1.2 APPLICATION

These guidelines have been prepared to ensure appropriate development within Station Square. These guidelines will form the basis of a development agreement between the purchaser of the land, and the SRA. Under the terms of the Subiaco Redevelopment Act 1994 the Authority issues development approvals in accordance with the Scheme Text. Building Licenses will be issued by the City of Subiaco or the Town of Cambridge, whichever is appropriate.

These guidelines should be read in conjunction with :

1) **Subiaco Redevelopment Scheme Text and Policies**

2) **Building Code of Australia**

1.3 THE SITE

Station Square is defined by Figure 2, Site Plan. It is bounded by Roberts Road to the south, Salvado Road to the north, and Station Street to the west. A new road, Church Street, defines the eastern boundary. Underneath the Square will be the new Subiaco Rail Station, currently under construction.

The site is comprised of seven lots with a combined area approximately 4.8ha.

Lot 7 is currently under the control of the Western Australian Department of Training and operating as a T.A.F.E annex. Negotiations are underway between W.A.D.O.T and S.R.A to secure Lot 7 for redevelopment, and it is expected that Lot 7 will become available for sale by the year 2000.

Lot 6 is owned by the Authority and will become available for sale/lease (see 1.9 Parking) at the completion of the Tunnel project.

The site has been generally cleared and rises approx 4m from its southern to its northern boundary.

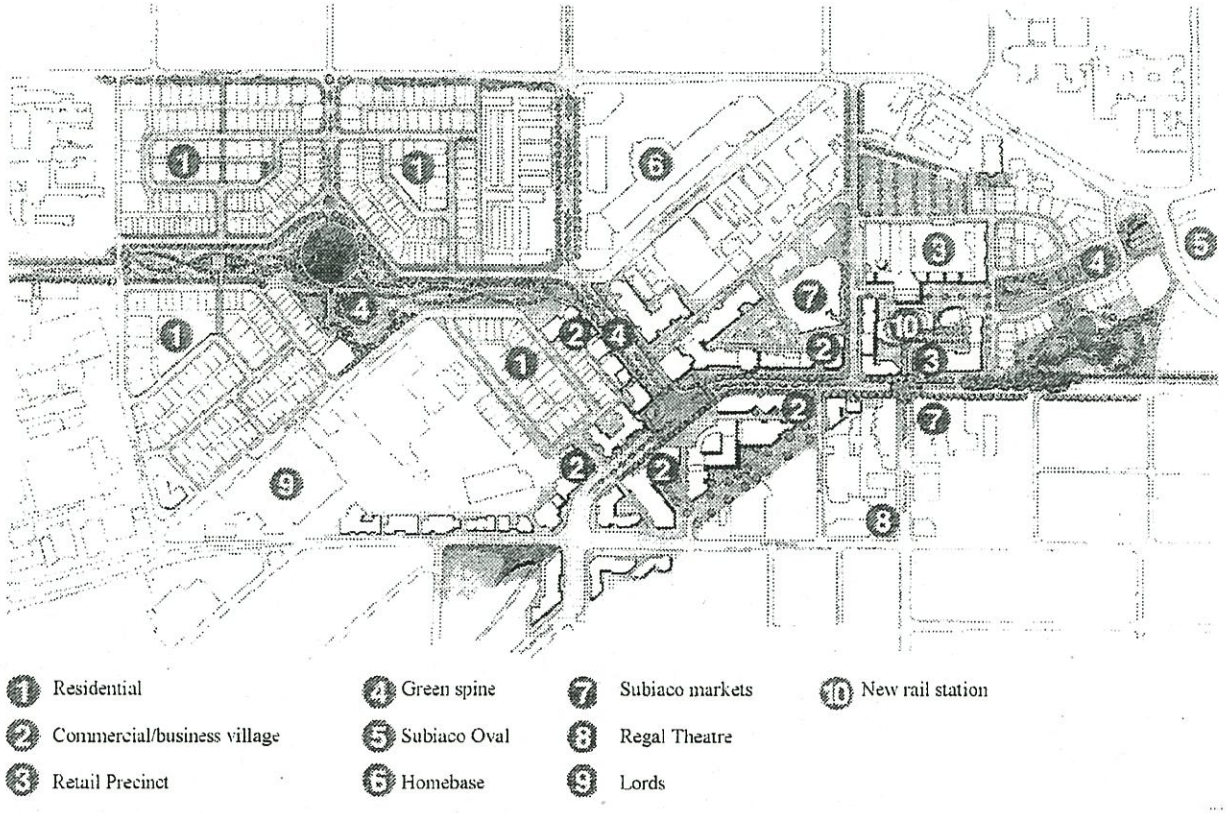


Figure 1 Subi Centro Masterplan

1.4 SUBIACO STATION

Figure 3 shows indicative sections and elevations of the new Subiaco Station, presently under construction.

Two large, oval openings in Station Square provide ventilation and light to the platform 6 metres below. Glass balustrades surround these openings.

The dominant features of the Station from the square are the modern gull wing roof structures to be constructed in steel (off-white) and roofed in colourbond finished roof sheeting (gull grey).

1.5 SITE EASEMENTS AND CONSTRAINTS

Figure 2, Site Plan indicates site constraints and easements, including the alignment of the Subiaco Railway Tunnel and the location of Subiaco Station.

Developers will have development rights but no rights of support over the tunnel. Figure 4, Rail Easement Section indicates the development constraints presented by the rail easement.

The railway easement ensures Westrail will have unimpeded access to any part of the rail tunnel and station both internally and externally.

Where Lots 2 and 5 span the rail tunnel, easements shall apply in favour of Westrail as indicated on Figure 4, and the titles for these lots will have covenants protecting Westrail's interests. Westrail will be consulted during the development application and building license assessment process.

For more detail on the tenure of this land see the Sale by Tender document.

Additional site development requirements include:

- the Rokeby Walk required pedestrian access,
- the Station Square vehicular access and
- the provision of an externally accessible fire hydrant enclosure (1500mm high, 2400mm wide & 500mm deep) for the Railway Station to be located on the corner of Rokeby road (extension) and Roberts Road as shown on Figure 2 Site Plan.

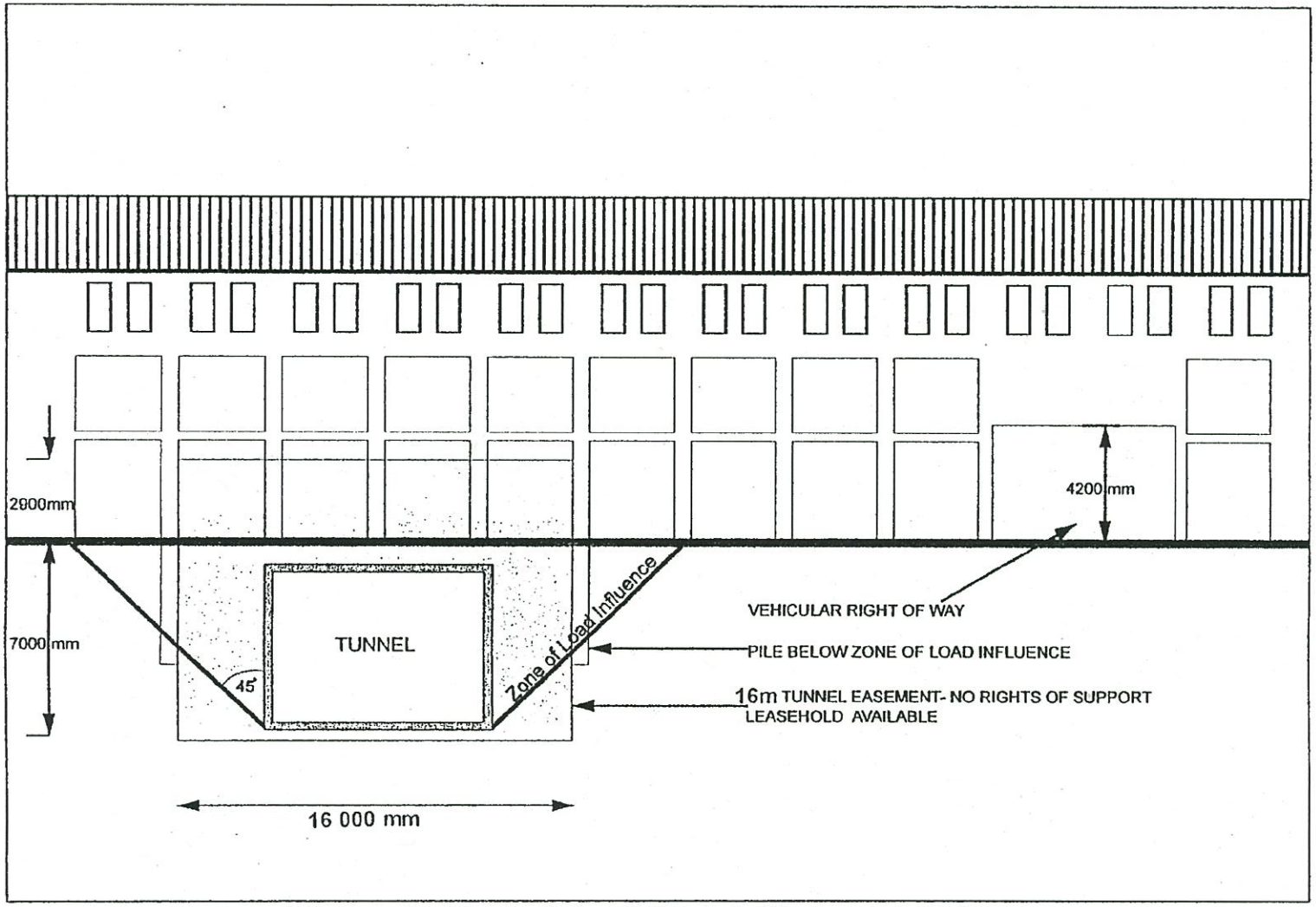


Figure 4 - Tunnel And Vehicle Easement Diagram

1.6 THE PUBLIC DOMAIN

SRA is offering Lots 1-5 for sale, and will implement all components of the surrounding Public Domain to be completed in time to suit the agreed development program. Figures 2 & 3 illustrate the extent of the Public Domain, including indicative road layouts within the square and, sections and elevations of Subiaco Station.

The Public Domain includes :

1) New roads namely, Church Street and Tafe Street, including footpaths parking and landscaping;

2) Upgraded the existing surrounding streets such as Station Street and Roberts Road;

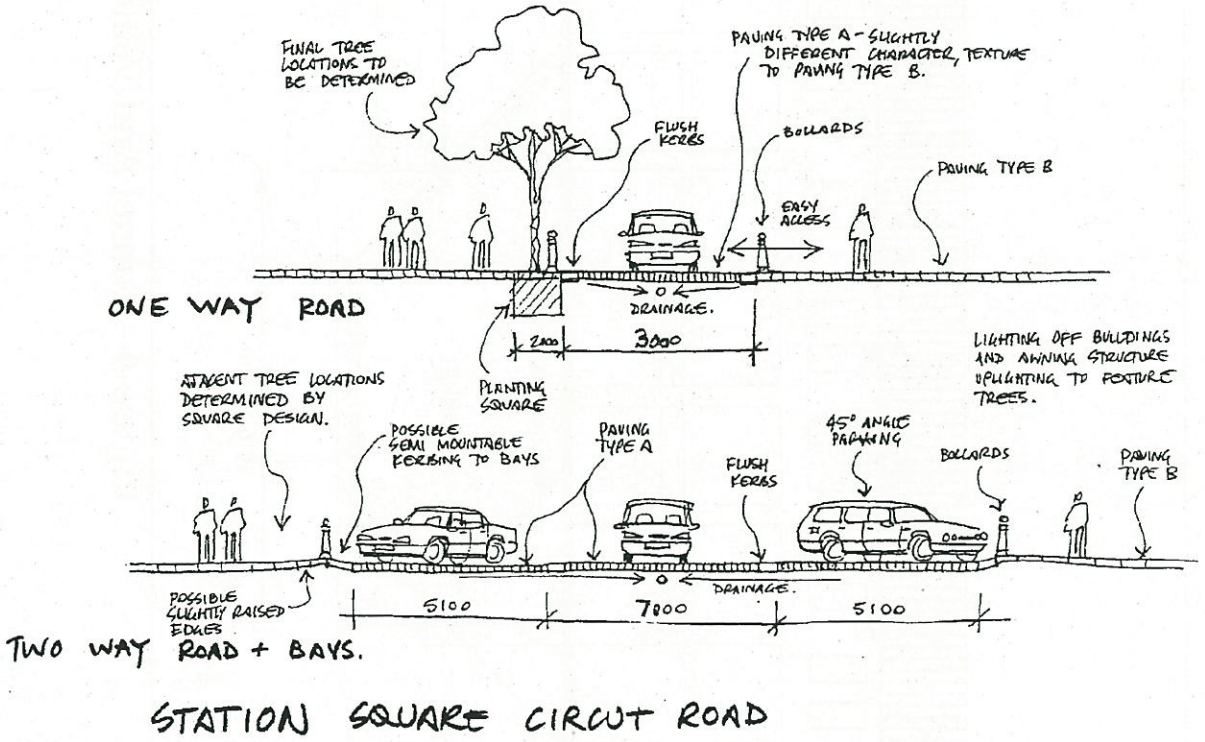
3) Reticulated street planting including verges, hedges and street trees;

4) Street lighting;

5) Street furniture where appropriate;

6) Station Square, including carriage ways and parking as shown, planting, drainage and reticulation; and

7) Public Art.



Indicative paving and planting details within the Square

The public domain will be developed and maintained by S.R.A until it reverts to the responsibility of the City of Subiaco or the Town of Cambridge.

Where the public domain abuts lots 1-5, the developer will be required to match the materials and surfaces established within the public domain.

The lot/public domain boundary on Lots 3 and 4 will need to be clearly defined within the paving.

Paving surfaces within Station Square will be high quality masonry and concrete flag pavers, with curbless carriage ways defined by bollards or similar.

Markets within the Square add vitality to any community.

1.7 ADJACENT USES

The land to the east of Station Square is owned by the S.R.A and is planned to incorporate R80 medium density housing, as illustrated on the Concept Plan for Subi Centro. The design of the Church Street frontage is therefore important and should be sensitively planned and designed.

The majority of the land to the west of the Station Precinct is privately owned, and is currently occupied by the Station Street Markets and a range of light industrial premises. Re-development of this land will be subject to the Redevelopment Scheme, however linkages, especially pedestrian access is important and an impermeable facade to the Square should be avoided.

1.8 PREFERRED USES

The Authority anticipates that Station Square will include residential, commercial and retail components.

The following table indicates the preferred uses for Station Precinct as defined by Subiaco Redevelopment Scheme Text. (Refer Scheme Text for full description).

TABLE 1

Category 1 Commercial	
Office	Tavern
Motel	Laundromat
Car Park	Club Premises
Medical Centre	Theatre / Cinema
Betting Agency	Restaurant
Consulting Rooms	Hall
Fast Food Outlets	Local Shop
Category 3 Retail	
Convenience Store	Garden Centre
Shop	Market
Local Shop	
Category 4 Residential	
Dwelling	Serviced Apartments
Aged Persons Accommodation	Lodging House
Bed and Breakfast	Local Shop
Home Occupation	
Category 5 Community Uses	
Educational Establishment	Civic Building
Hall	Public Worship - Place of
Day Care Centre	

The Scheme also states that Category 6 Recreational Uses is a 'Potential Use' within the Precinct.

Category 6 Recreation uses	
Public Open Space	Recreation Facilities

S.R.A has set the limit of 7000m² of retail development (Category 3 Retail) for Lot 1.

The total floor space allowance of Category 3 Retail for all lots is 10 000m² as per the requirements of the Redevelopment Scheme.

1.8.1 COMMUNITY FACILITIES

Both the SRA and the City of Subiaco see the provision of a "Police Post" located within the buildings fronting the square as being highly desirable. The Police Department have advised that they require approximately 50m² of shopfront (or relatively visible and accessible floor space) in order to effectively carry out local operations. The SRA will look upon proposals favourably where this facility is provided for. Details as to leasing arrangements can be discussed further between the preferred tenderer and the Police Department when appropriate.

The City of Subiaco have requested that the developers make provision for public toilets in a location that is immediately accessible to the users of the square. Council will maintain and clean such a facility. The provision of such a facility will also reduce public pressure on tenant and patron facilities. Again the SRA will look upon proposals favourably where this facility is provided.

1.9 PARKING

The carparking requirements for development within Station Square are defined by the following table, taken from the Subiaco Redevelopment Scheme Text. For a full description of the parking requirements including relaxations and payment in lieu of parking, refer to the Scheme Text.

CAR PARKING REQUIREMENTS

DEVELOPMENT	MINIMUM CAR PARKING SPACES REQUIRED	MAXIMUM EXCLUSIVE USE ON-SITE PARKING
Residential	1 per dwelling	2 per dwelling
Office	1 per 40m² gross floor area	1 per 25m² gross floor area
Consulting rooms veterinary clinic, service industry	1 per 50m² gross floor area	1 per 40m² gross floor area
Medical Centre	2 per practitioner	4 per practitioner
Research and Development, warehouse, light industry	1 per 70m² gross floor area	1 per 50m² gross floor area
Showroom	1 per 100m² gross floor area	1 per 50m² gross floor area
(a) A shop or collection of shops which has a floor area that exceeds 1000m², a market.	1 per 20m² of gross floor area	1 per 15m² of gross floor area
(b) All other shops	1 per 30m² of gross floor area	1 per 20m² of gross floor area
Convenience store, betting agency, garden centre, dry cleaning premises, laundromat.	1 per 30m² gross floor area - within Precinct 1 (Station) 1 per 15m² gross floor area - outside Precinct 1 (Station)	1 per 20m² gross floor area within Precinct 1 (Station) 1 per 10m² gross floor area - outside Precinct 1 (Station)
Hotel, motel, tavern restaurant, theatre, cinema, hall, club premises, lodging house, serviced apartments	1 per 4m² of public drinking area 1 per 4 seats provided or which an eating area is designed to provide, 1 per 2 bedrooms 1 per 10 seats of hall, theatre, cinema (as applicable)	Hotel, motel - 150% of minimum requirement. Tavern, restaurant, theatre, cinema, hall, club premises, lodging house, serviced apartments - 200% of minimum requirement.
Day Care Centres	1 per 8 children plus 1 per 3 staff	1 per 4 children plus 1 per 2 staff
Fast Food Outlet	1 per 20m² gross floor area, plus 1 per 6 seats provided or which an eating area is designed to provide	1 per 10m² gross floor area plus 1 per 6 seats provided
Educational Establishment	1 per classroom or 1 per 2 staff whichever is the greater	1 per classroom or 1 per staff whichever is the greater

The scheme should be interpreted to mean that where there is a particular concentration of Retail floor space (both anchor tenants and smaller shops) such as on Lot 1, the rate of parking provision should be 1 bay per 20m² GFA. Where the retail is singular or insubstantial. (such as on lots 2,3,4 & 5), then the rate of provision should be 1 bay per 30m² GFA.

To ensure that Station Square develops to the density considered desirable by the S.R.A. the Authority will provide sufficient land in the vacinity (possibly Lot 6) for a 150 bay, at grade carpark to be leased or sold to.developed and maintained by the developer/owners of the centre. The relevant proportion of such a carpark must be made available to the public as short term parking. Council have indicated that they would be willing to discuss the possibility of them policing the short term component of the carpark.

Parking will be allocated as

Lot 2	29 bays
Lot 3	27 bays
Lot 4	63 bays
Lot 5	31 bays
TOTAL	150 bays

1.10 PLOT RATIO

The plot ratio as defined in the Scheme for development within Station Precinct is :

1) Maximum plot ratio - 1.33:1

2) The maximum plot ratio may be increased to 2.0:1 provided that in any development having a plot ratio in excess of 1.33 not less than 50% of the excess relevant floor area shall be dedicated to residential use.

For Lots 2, 3, 4 and 5, the area of Station Square will be added to the areas of each individual lot on a pro-rata basis for the purposes of calculating plot ratio. This formula will enable the subject lots to be developed in accordance with the principles outlined in Section 2- 'Station Square Design Guidelines'. Development immediately fronting the square must comply with the building envelopes described in Section 2.

Plot Ratio is defined by the Redevelopment Scheme as :

"the ratio of the gross total of the areas of all floors to the land area within the site boundaries and in calculating the gross floor area of all the floors the areas shall be measured including any walls but shall not include lifts, stairs or stair landings, machinery rooms, air conditioning rooms, equipment rooms, non-habitable floor space in basements, areas used exclusively for parking for wheeled vehicles at or below ground level, lobbies or amenities common to more than one dwelling or occupancy or private open balconies"

For the purpose of calculating Plot Ratio. for Lots 2, 3, 4 and 5, land within Station Square may be distributed to these lots as per the following table :

Lot Number	Cadastral Area	Including Square Allocation
1	18222 m^2	21726 m^2
2	955 m^2	1650 m^2
3	886 m^2	1510 m^2
4	2090 m^2	3555 m^2
5	1020 m^2	1740 m^2
Total	**23,173 m^2**	**31,921 m^2**

1.11 SERVICES

1.11.1 SERVICES

Water, sewer, gas and communication services exist within the existing road reserves of Station Street and Roberts Road. It is proposed to extend these services to service sites as required.

1.11.2 DRAINAGE

All stormwater should be contained within the site in accordance with Subiaco Council regulations. Storage criteria is currently determined at 15mm of rain over each square metre of impervious area. The road drainage system will be designed to cater for overflow after this storage has been exceeded.

As private developers may be building up to lot boundaries, surface stormwater drainage will be held within each lot or flow immediately into the public domain. However, there may be instances where drainage from larger private external areas is required eg: building recesses. In these circumstances, the developer shall be responsible for surface drainage to be held and disposed of within the lot. However where less than $10m^2$ of private external space requires drainage this may be directed to the public domains surface drainage system to avoid unnecessary use of surface level drains for falls in small areas.

1.12 INTEGRATION OF ART

The incorporation of public art in any new development will enrich the final design response and contribute to the creation of a sense of place. The authority will incorporate a substantial amount of public art in the railway station & public square.

Consequently, the use of artists as part of the design team for new developments is strongly encouraged. Art work may be either functional or non functional. Art can be an integral part of the wall detailing, balustrades and railings, paving, shade structures, seatings, bins, bollards, drinking fountains, lighting, building fittings, entry treatments and signage. Alternatively, the artwork may be non functional with no purpose other than to intrigue and delight.

1.13 MAINTENANCE

The maintenance of all works installed on public or private property is critical to the overall image and success of this precinct. As such, a comprehensive, agreed and approved maintenance regime will be required for all privately held external spaces incorporating both hard and soft works and shall be deemed to extend indefinitely for all developers, owners or tenants.

Items required to be covered by a maintenance document will include but not be limited to hard surfaces, built form, planting, reticulation, rubbish collection, signage, lighting, storage, procedures and timing and graffiti removal.

Generally, maintenance of all surfaces, fixtures and fittings, vegetation, paving, lighting, signage and furniture and any other items located on private property shall remain the responsibility of the developer, owner or tenant.

2. STATION SQUARE DESIGN GUIDELINES

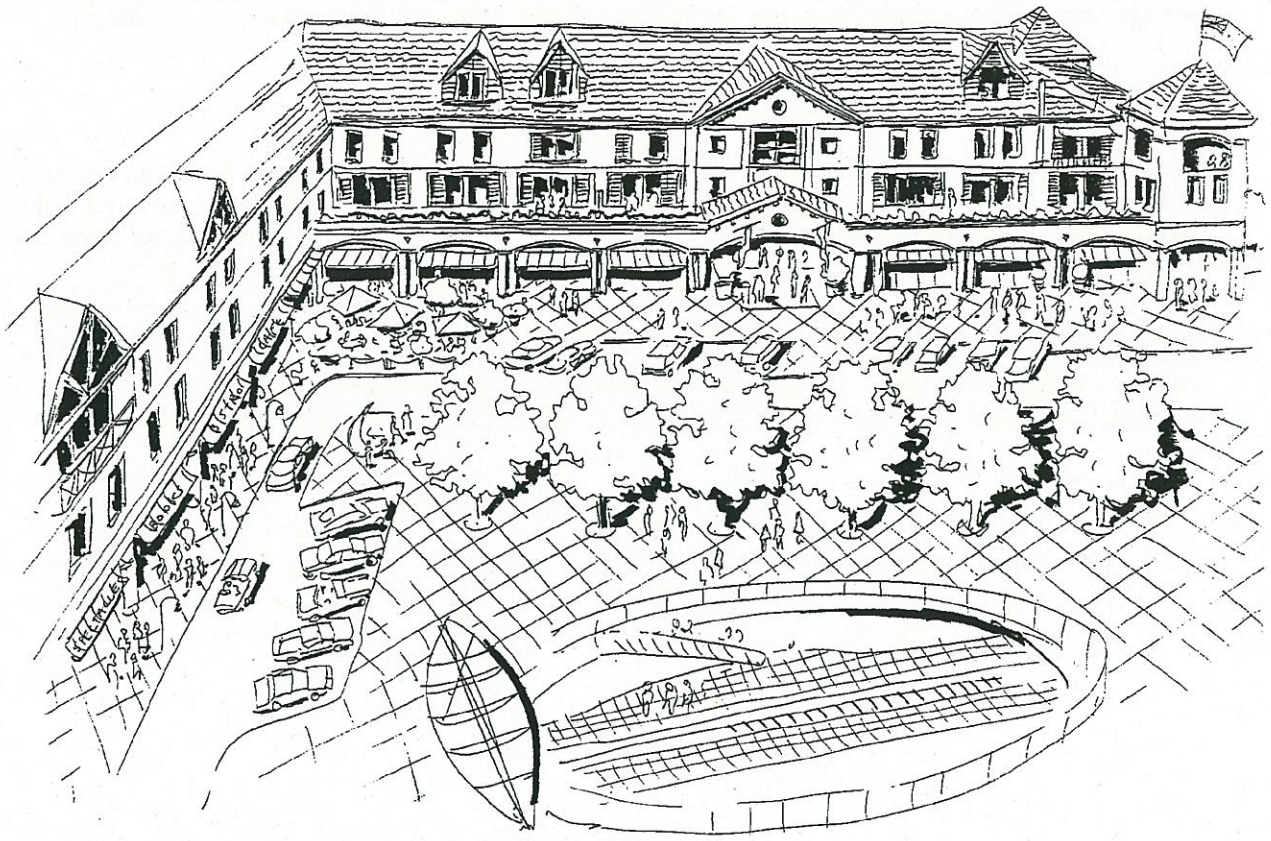
2.1 DESIRED CHARACTER AND STREETSCAPE

Subiaco is renowned for its intimate residential streetscapes and its Gold Rush (circa 1900) two storey heritage buildings that line Rokeby Road and Hay Streets.

The buildings and square that comprise the new Station Square must reflect this Subiaco character in terms of its human scale and its high level of mixed uses. The scale of the square has no direct precedence in Perth except perhaps Forrest Place in the city, but is expected to be finer grained in nature, with retail, commercial, cafes, restaurants and residential all centred around the railway station.

The new station structures are lightweight and modern, and will take centre stage within the square. By contrast, buildings facing the Square should have a sense of solidness and repose.

Buildings will be required to have surface articulation that at street level is at human scale. Balconies and awnings are encouraged to introduce a degree of light and shade to building facades.



View of Square showing alfresco terrace with residential uses above.

2.2 BUILDING ENVELOPES

2.2.1 LEVELS

Levels are to be generally in accordance with those described in Figure 2. Site Plan.

2.2.2 SQUARE BUILDING LINE

Development is required to define the square, with building envelopes as shown on Figures 5-8. Construction to internal lot boundaries shall incorporate a 3m Pedestrian Access within Lots 2, 3, 4 & 5, and should take the form of a masonry colonade or a robustly constructed verandah.

2.2.3 BUILDING HEIGHTS

Building Heights are to be in accordance with those described in Figures 5,6,7 & 8. Buildings fronting the Square shall be limited to 3 storeys in height. Buildings on Lot 1 that do not front the square may be up to 4 storeys in height. Roof pitch may not be less than 30° unless adequately treated with parapet walls.

A minimum floor to ceiling height of 3.6m to the ground floor and 2.7m to subsequent floors shall be maintained throughout except in service areas, kitchens, wet areas and stores. Loft ceiling heights shall be averaged at 2.7m.

Roof plant and equipment shall not be visible from public areas. Site line diagrams and plans indicating positions of plant and equipment must be submitted at the time of planning approval.

2.2.4 STREET SETBACKS

A uniform street set back for lots 1-5 of an averagable 0.3m has been set to ensure appropriate surface articulation.

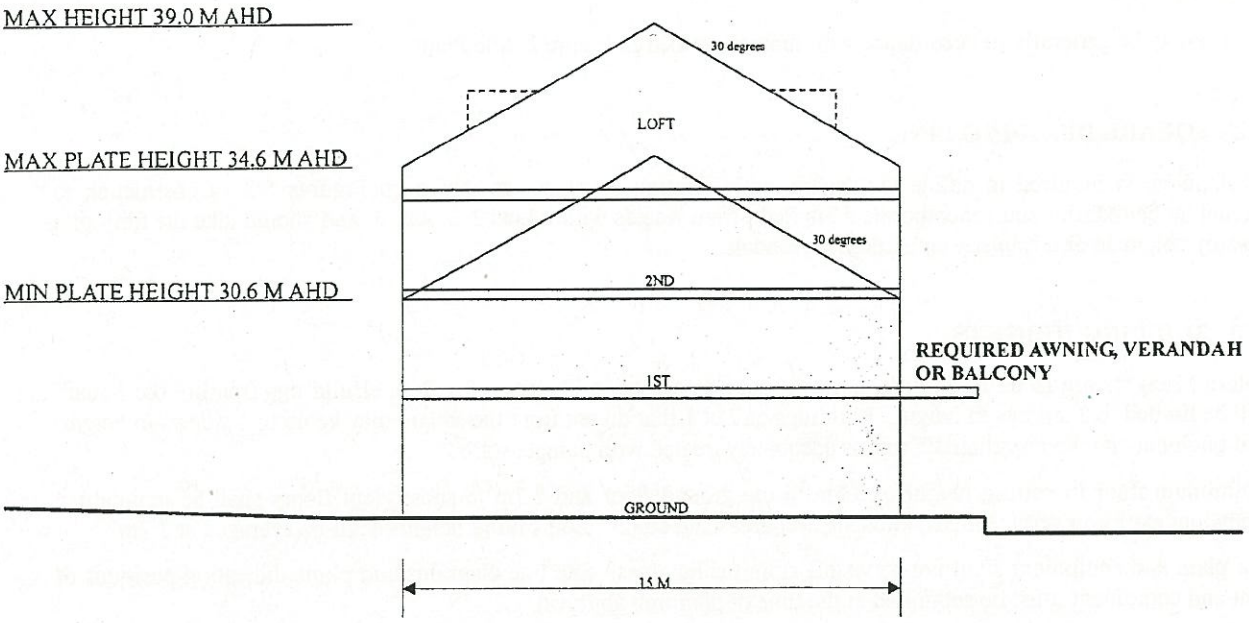


Figure 5 - Lot 1 - Southern Boundary - Permissible Building Section

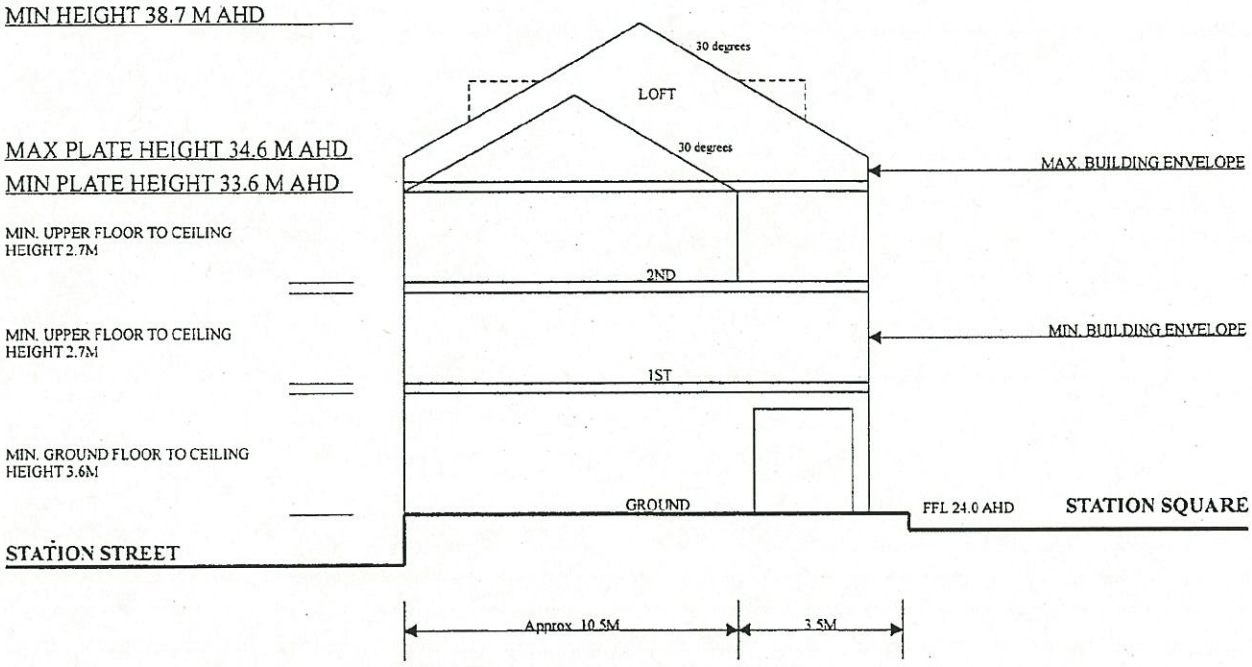


Figure 6 - Lot 2 + 3 - Permissible Building Section

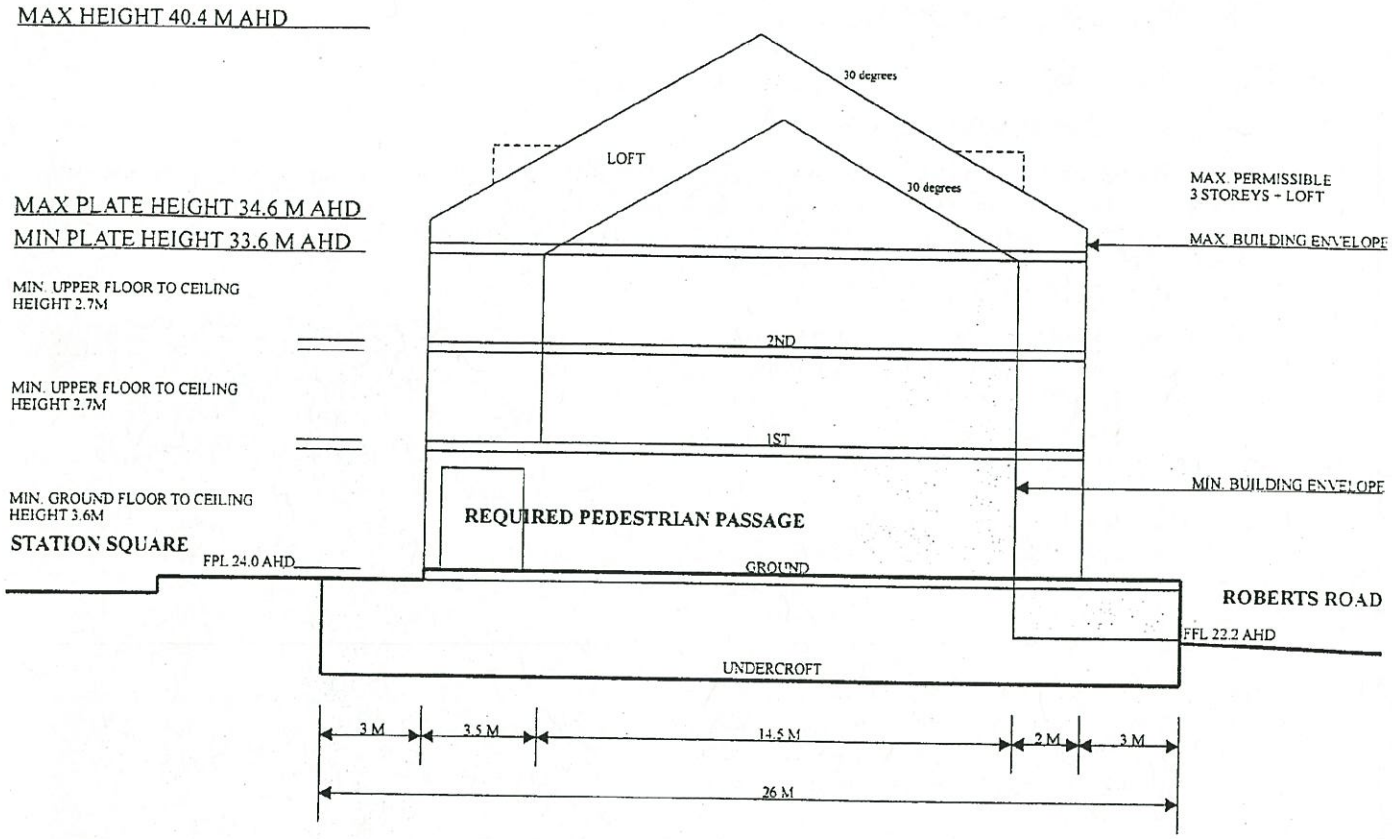


Figure 7 - Lot 3 + 4 - Permissible Building Section

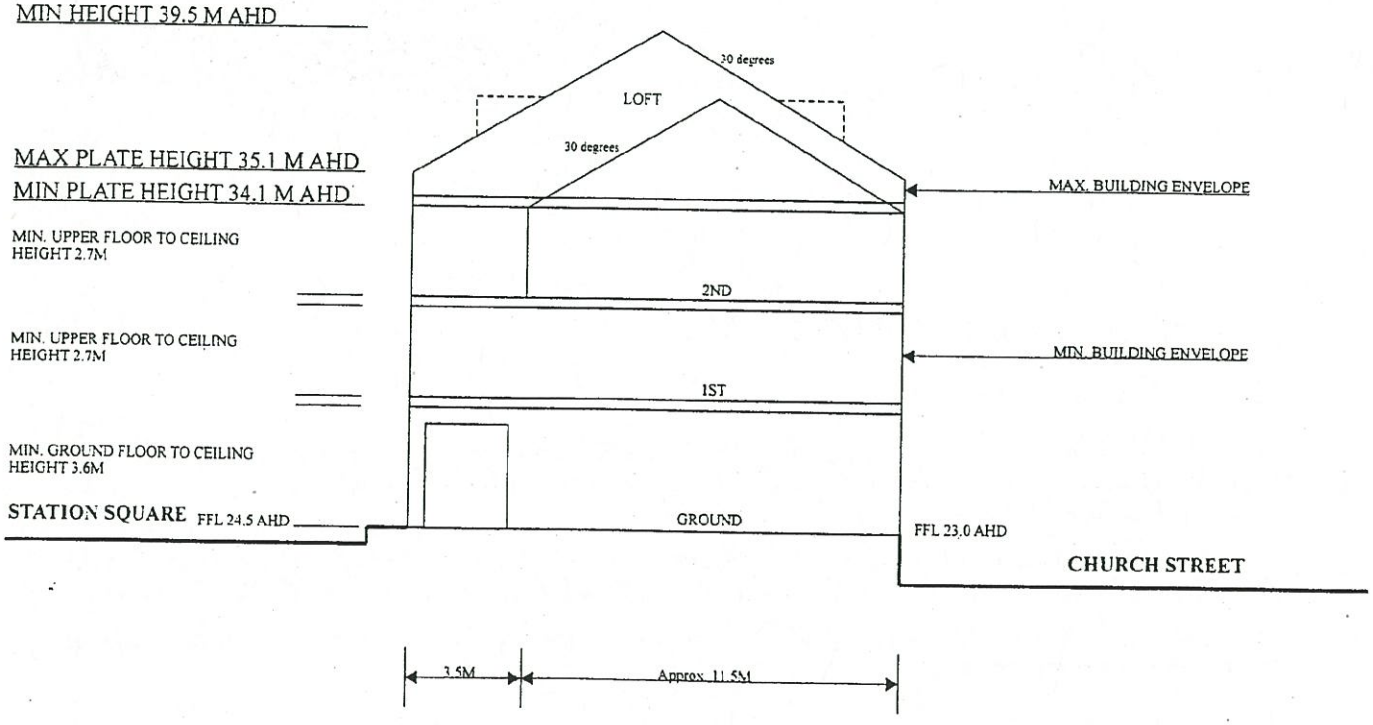


Figure 8 - Lot 4 + 5 - Permissible Building Section

2.3 BUILDING FORM

2.3.1 ROOF FORM

Permissible roof forms are defined by figures 5-8.

Dormer windows may be permitted to protrude beyond the described building envelopes, and must have pitched roofs of a similar material to that of the main roof and be in proportion with the roof plane in which they are located. Gabled roofs perpendicular to the dominant roof form are permitted to project outside the Building Envelope. Such gables should be used sparingly and should only be used to indicate major entrances to tenancies.

While traditional pitched roofs are preferred, forms such as skillions, saw tooth and curved roofs may be used subject to the approval of SRA.

2.3.2 BUILDING ENTRANCES

Major entrances to buildings should be articulated in a fashion that makes them clearly identifiable within the overall building form.

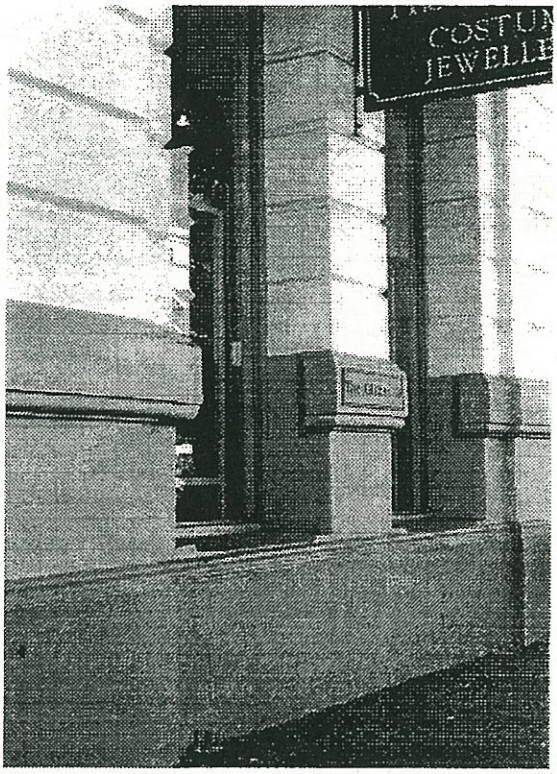
2.3.3 ARTICULATION

Building forms should be articulated in a manner in which is appropriate to their size and bulk with particular attention being paid to create a pedestrian scale at ground floor level. Large blank walls abutting the Public Domain are not acceptable.

2.3.4 DETAIL

Detailing of building surfaces is an appropriate method to provide interest at a pedestrian level. This detail should be integral to the building construction and should not take the form of applied decoration.

Neo-federation applied decoration will not be considered appropriate. Applied grooves and decoration in tilt up concrete panels will not be considered adequate.



Example of detailed surface that provides interest at the pedestrian level

2.4 FACADES AND FRONTAGES

2.4.1 ADDRESSING THE SQUARE

Station Square has been designed to facilitate retail, the anchor tenant on Lot 1, commercial and residential development to ensure the efficient use of the Subiaco Station, and to promote other uses that will contribute to the vibrancy and security of the precinct as a whole.

Ground floor tenancies of specialty retail, the anchor tenant on Lot 1, cafes and restaurants will bring people to the square. These uses will augment and compliment pedestrian facilities already provided within the Public Domain.

Commercial and residential tenancies on higher floors shall have windows facing the square that enhance a sense of safety through passive surveillance.

Any anchor retail tenancy must have its entrance fronting the Square. All other ground floor tenancies must have entrances to the square and are encouraged to also incorporate entrances to external street frontages.

2.4.2 STREET FRONTAGES

In general, the full development of Lots 2.3. 4 and 5 will produce quite long, prominent buildings, it is therefore important that these buildings are appropriately articulated to reduce their visual bulk.

Station Street and Church Street frontages should be designed according to the scale of their activity, adjacent land uses (residential) and places of interest and should serve to attract pedestrians through to the numerous opportunities within the square.

Roberts Road frontages should reflect the requirement that Station Square is to be a major gateway both to and from the existing Subiaco. It is required that the southern entrance to Station Square will be a direct extension of Rokeby Road, and hard and soft landscaping themes already established on Rokeby Road will be incorporated into this entrance to help create a visual connection.

Entrances to premises fronting Roberts Road should be clearly articulated within the building form. This includes enhancement to any undercroft parking that takes advantage of the change of level between Station Square and Roberts Road.. Ground floor entrances to tenancies from Roberts Road must be provided.

Station Street links Robert Road to Salvado Road, and will provide commercial opportunities to the east side of the road. Commercial development of Station Square fronting Station Street must reflect this use.

Church Street is a cul de sac at Roberts Road and will become a quiet residential street, with predominantly terrace housing fronting the eastern side of the street. Development of Station Square bounding Church Street must compliment this residential use. Small commercial and residential tennancies are considered appropriate. Development of any major retail anchor tenancy adjacent to or backing onto Church Street must be adequately

Example of a facade devoid of interest or delight, with no real surface articulation or detail

screened from the street.

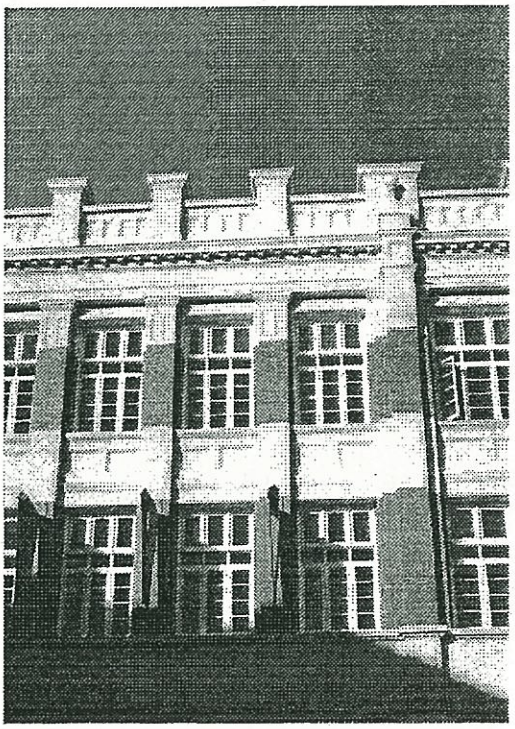
Anchor tenancy service areas must not front onto or impact on the residential amenity of Church Street.

2.4.3 FACADES

Facades shall be designed to promote a sense of human scale. This can be achieved by reducing the overall mass of the facade through the incorporation of ;

- deep door and window reveals.
- quoining around windows, doors and to corners,
- string courses that express floor lines and window sill and head heights,
- parapets that have a degree of articulation and details,
- awnings and balconies, and
- pilasters.

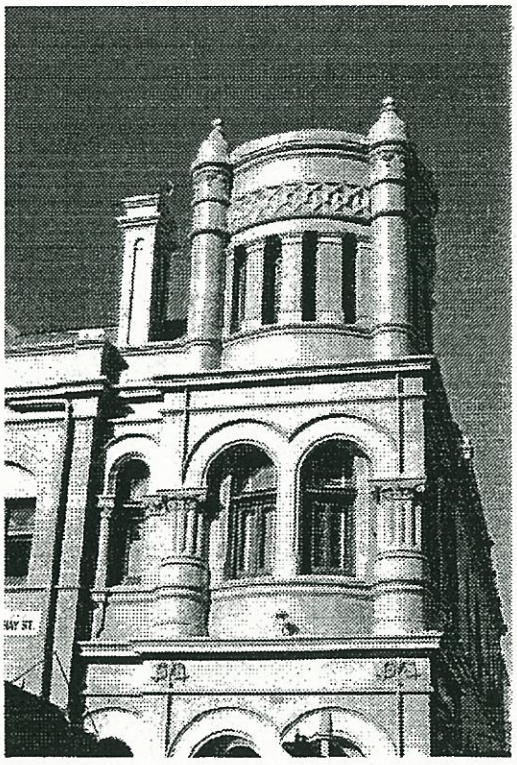
Facades should be designed to produce a co-ordinated, cohesive frontage to the square and surrounding streets. While elevations should differentiate between public activities of the ground floor and the more private activities of upper levels, they should contain elements that link all floors of the building.



Example of detailed facade

2.4.4 CORNER SITES

Principal corner sites including the entrance to the Square at Rokeby Road and the intersections of Roberts Road and Church and Station Streets should provide a clear definition of mass for the entire development. Buildings must have common facadal elements on both sides of the corner. Preferred treatment of these corners include chamfered faces to contain windows, major ground floor entrances, and interesting attached vertical forms.



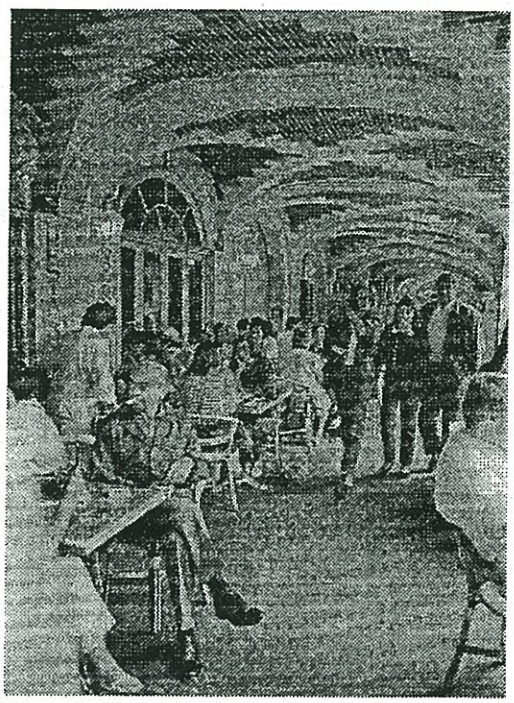
The expression of a corner

2.4.5 COLONADE AND VERANDAHS

The colonnade or verandah structure bounding the Public Domain must be of a substantial nature and provide a clear delineation between pedestrian and vehicular routes. Posts or columns should match the rhythm established by adjacent shop fronts. Columns and posts shall be constructed and detailed to resist damage and marking by shopping trolleys. These structures shall be predominantly masonry unless otherwise approved.

2.4.6 BLANK WALLS

Large blank walls abutting the public domain are not acceptable.



Place de Voges in Paris. An active colonnade

2.5 SHOP FRONT DESIGN

2.5.1 SHOP FRONT DESIGN

Tenancy shopfronts are to be designed as an integral part of the overall building with a consistency in materials and character while allowing individual expression of each tenancy.

A margin that is consistent in material and detail with the overall building design should separate each tenancy.

Where the shopfront facade is fronted by a colonnade, the tenancy margin should relate in rhythm and character to the columns of the colonnade.

Shopfronts should be articulated between separating margins with bay windows, recessed doorways etc, to give interest to the facade.

The shopfront should predominantly be glazed and glazing must finish 2.7m above floor level.

Materials used on the lower parts of shopfronts must be robust and adequately protected from trolley damage. Particular attention must be given to corner details.

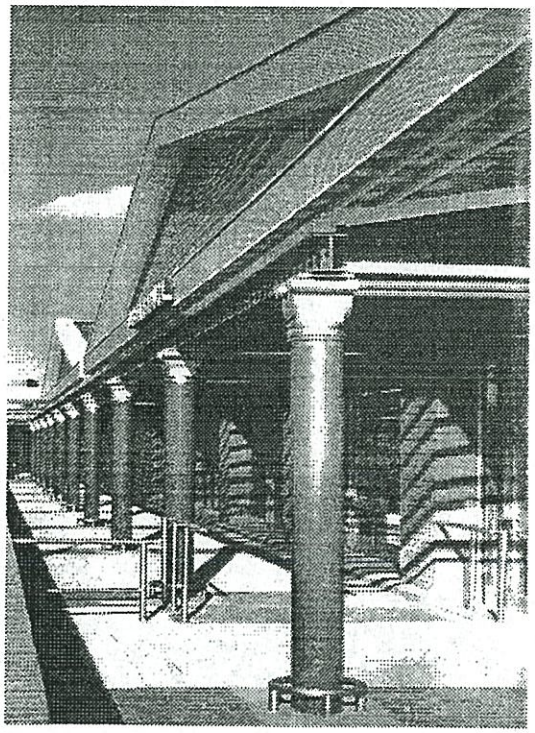
Shopfronts should be designed to accommodate tenancy signage having regard to their size, location and detail.

Roller shutters will not be approved unless they provide clear viewing of the tenancy when closed and are concealed from view when open.

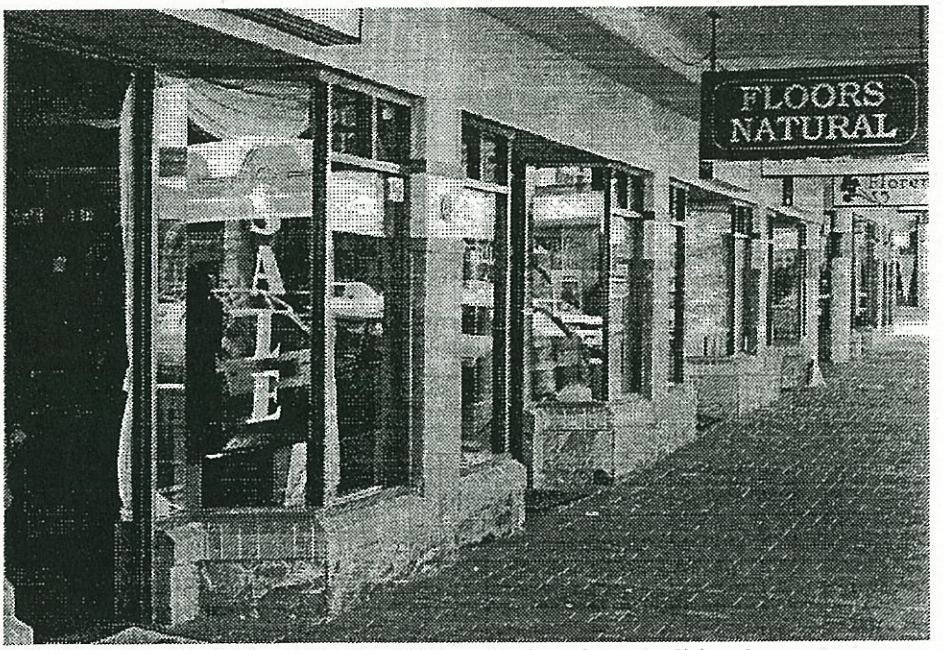
Counters to the front of open tenancies and kiosks will be constructed of durable materials in keeping with the surrounding building fabric. Laminated plastic will not be approved. The counter line will accurately follow the tenancy line and present a simple, streamlined frontage.

Kiosks must be designed in keeping with the surrounding buildings.

All plant and equipment must be concealed from public view, not audible from any proposed residential and must be located at roof level.



Traditional Rokeby Rd fronts. Note articulation of surface



Hay St. shop fronts, a contemporary interpretation of the traditional.

2.5.2 TENANCY FITOUT

Tenancy fitout is to be fully detailed for approval by the Authority prior to commencement of work.

Issues to be addressed include;

1. Full signage details materials, size, graphics, fixing methods. (Refer to 2.6 Signage).
2. Any modification to the shopfront itself.
3. Tenancy layout details including lighting, plant and equipment and cabinet work.
4. Details of alfresco areas including paving, furniture, planters etc.

Fitout that does not comply with approved plans will be required to be removed and replaced prior to commencement of trading.

2.6 SIGNAGE

A high standard of signage is expected. All signs (location, design and content) will be subject to the Authority's Signage Policies and require the planning approval of the Authority.

The proposed locations for signs in accordance with these guidelines are to be nominated at the time of application for planning approval for the building. Variations to the approved locations will require further approval. No additional signs will be approved.

Signs attached to buildings should be aligned with and relate to the architectural design lines of a building facade. Signs should not obscure architectural features.

2.6.1 PERMITTED SIGNAGE LOCATIONS

A sign identifying the name of the building may be permitted in a location not specified above, subject to it being designed as an integral part of the buildings architecture. Proposals for such signs will be judged on their merits.

The following types of signs are not permitted on buildings;

- Roof (or sky) signs,
- Rotating, moving or inflated signs, bunting,
- Hoardings.
- General advertising signs (non specific to the nature of the retail/commercial activity).

Generally, each commercial building tenancy will be limited to the following number of signs, although the Authority will consider proposals to provide more in exceptional circumstances;

- Two ground floor signs for each street level commercial tenancy,
- One sign per upper floor level individual tenancy,
- In buildings with numerous tenants, shared signage is preferred,
- Apart from a building name, no signs are permitted on residential buildings.

Horizontal signage may be 450mm high, vertical signage 450mm wide.

Hanging signs under awnings, verandahs, balconies or colonades (as per photo's on previous page)must have 2.7m clearance to pavement level below.

2.7 BALCONIES, VERANDAHS & AWNINGS

Balconies fronting pedestrian access ways or streets may project up to 0.9m beyond the lot boundary, and 1.5m beyond the boundary over pedestrian access ways.

Projections or verandahs must have a clearance above footpath level of 3.3m. Where level changes demand it, verandahs are to be stepped to conform with the grade of the footpath. In such cases the steps should not exceed 600mm and the clearance above footpath level may be reduced to a minimum of 3.0m.

Where a verandah abuts another verandah, the two are to be finished so as to maintain continuous weather protection. It will be the responsibility of the person erecting the new verandah to effect this result.

The maximum finished overall depth of the fascia of any verandah is to be 450mm.

Sun-hood type awnings may project up to 0.9m beyond the lot street boundary.

Any balcony, verandah or awning that overhangs or abuts a trafficable street or lane must have 600mm minimum clearance from the likely passage of vehicles, including emergency vehicles. Allowance should also be made for the unimpeded growth of any nearby street tree.

Balconies provide surface articulation and reduce the mass of a facade

2.8 SECURITY

2.8.1 SIGHT LINES

Building designs should maximise sight lines in both plan and section. Blind spots should be eliminated to promote pedestrian and vehicular safety and security.

2.8.2 LIGHTING

Generally, lighting shall be utilised to highlight features or floodlight large ground areas for safety and security purposes. Lighting fixtures must be sturdy, durable, vandal resistant, and easily replaced and maintained. Lighting fixtures visible from the public domain shall compliment the building character and intended Cosmopolitan style design intent. Generally lighting should be fixed to buildings above 2.7m in height to prevent public access.

It is essential that lighting be directed so as to have no impact on any residential dwelling and minimal impact on adjacent commercial premises.

In some instances, lighting specifically required to light the public domain may be fixed to buildings, this shall be subject to consultation with owners/developers or tenants.

Lights illuminating ground floor tenancies and signs shall be switched to time clocks and must stay on until at least 9pm.

Pedestrian walkways must be adequately lit 24 hours a day.

2.9 ACCESS AND PARKING

2.9.1 VEHICULAR ACCESS TO LOTS

Vehicular access to Lot 1 is permitted off any of the surrounding streets (Station, Church or TAFE) with the preferences being Station or Tafe Street. No vehicular access will be permitted off the Station Square access road that forms the southern boundary of the Lot. Vehicular access to Lots 2 and 3 (basements) should be located between the tunnel alignment and Roberts Road. Access to the basement levels of Lots 4 and 5 should be via the southern end of Church Street.

2.9.2 PEDESTRIAN ACCESS

Priority is to be given to maximise pedestrian access and circulation within the Station Square. ACCESS standards must apply to all pedestrian areas. Developers are required to conduct a disability audit of their development application/s.

The required locations for pedestrian access routes are shown on Figure 2 - Site Plan.

Whilst the building form is generally to create sense of "square", pedestrian permeability through buildings bounding the square is considered desirable.

Direct pedestrian access routes through and to on site parking areas are essential.

Development should provide shaded and sheltered pedestrian routes throughout the Station Square.

2.9.3 PARKING

Parking within the Public Domain is as shown conceptually in Figure 2 - Site Plan and will be subject to further detailed design by the S.R.A.

"Park and Ride" facilities are not envisaged at this location. This will be controlled by means of parking regulations.

Parking requirements shall be in accordance with clause 36 of the Subiaco Redevelopment Scheme, see 1.9 Parking for a summary of this clause.

Landscaping requirements within parking areas is described in 2.11.2-Car Park Internal Planting.

No mechanical ventilation of multi-storey carparks may discharge horizontally into the Public Domain.

Undercroft or basement parking that will enable sites with Station Square to be self sufficient is desirable. Figure 2 Site Plan indicates the extent to which basement carparking may extend beyond Lot boundaries underneath the square. This includes a basement level access tunnel between Lot 3 and 4. The depth of the basement will have to suit the provision of services and planting etc within the square.

2.9.4 STREETSCAPES AND TRAFFIC CONTROL

Generally streetscapes shall;

- assist in creating the desired Cosmopolitan plaza character using materials, colour, texture, scale and edge treatments,
- be bounded by semi-mountable or where designated flush kerbing, enabling ease of pedestrian movement,
- contain some subtle distinction between vehicular and pedestrian zones through use of grade, level, colour, texture or paver shape,
- control traffic flow by containing and guiding vehicles. This may be achieved using bollards, street furniture, planters, trees and signage, particularly where flush kerbing occurs,
- enable maintenance and emergency vehicle access into pedestrian zones,
- contain the minimum required signage and line marking to enable ease of vehicle and pedestrian flow, and
- be constructed of durable, non slip, vehicle trafficable segmented pavers.

2.9.5 BICYCLES

Developers of Lot 1 must allow adequate provision for bicycle racks and bicycle access within the overall design. Standards for this design are described in :

- GUIDELINES FOR THE DESIGN OF BICYCLE FACILITIES (Bike West) Department of Transport
- AUSTROAD, PART 14 - available from the Main Road Western Australia.

2.10 MATERIALS, COLOURS AND TEXTURE

2.10.1 WALLS

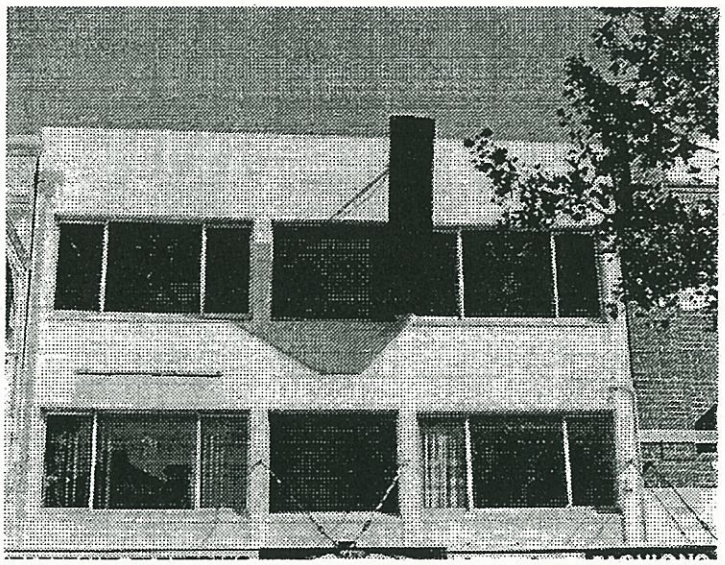
Walls should be predominantly of masonry, natural brick, face rendered or painted. Tiled, granite or marble cladding can be used to provide opportunities to deliniate entrances and provide points of interest and decoration.

It is recommended that the ground floor of buildings fronting Station Square be differentiated from subsequent floors to indicate the more public activities located on the ground floor.

In a similar manner to traditional strip shopping and high streets, ground floor wall treatments should vary along their length so as to allow patrons easy recognition of various tennancies.

Whilst wall treatments and shop front design may vary, the festive nature of the square should be enhanced with the co-ordinated use of colour, particularly applied to fenestration, doors, shutters and awnings.

Areas of aluminium cladding, high quality corrugated metal decking or smooth dressed timber cladding will be permitted subject to their successful integration to the square in its entirety.



Unacceptable horizontal window expression, minimal reveals

2.10.2 PAVING

Generally, paving elements laid in non public areas shall;

- correspond with or compliment the paving used in the public domain. Colour, texture, durability should be utilised to create the intended urban character of the precinct. There is however scope for some subtle delineation of private spaces by use of paving types, colours and textures. These will be subject to review and approval procedures,
- consist of segmented paving in the main, possibly with smaller insitu highlights, preserving ease of removal and relaying to enable access to services,
- conform to all relevant standards for durability, non slip textures and best installation practices including subgrade preparation,
- perform an adequate drainage function,
- be designed of suitable strength and surface treatment to withstand service vehicle access, pedestrians and bicycles,

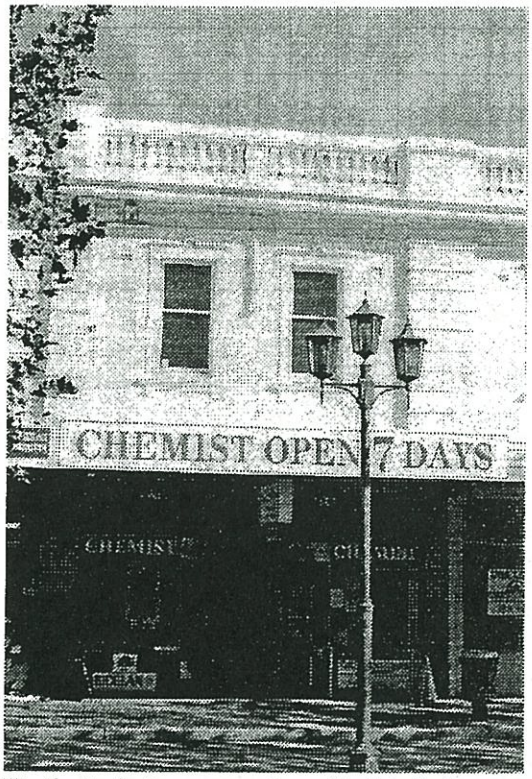
- maintain colour and strength for a minimum of 20 years and be of reasonable match and fit to existing paving when replaced or repaired.
- be designed to facilitate ease of use by the disabled and the aged, and
- be of materials that are cost effective to replace, readily available and require limited maintenance.

2.10.3 WINDOWS

The use of reflective or obscure glass will not be permitted. The use of lead lighting or detailed glazing at ground level is strongly encouraged. Exterior shade structures should be used where it is necessary to protect windows from summer sun, and can include awnings, both folding or fixed and shutters. Weather protection elements should be designed as an integral component of the building rather than as awkward addition.

Windows to upper floors should have a vertical rather than a horizontal expression with window sills to be generally no higher than 750mm above floor level. Window and door reveals shall be a minimum of 150mm from the external face of any wall to the glass or door plane.

Areas of curtain wall glass (non-reflective) may be permitted but should be augmented with a degree of horizontal and vertical sun shading to maintain a sense of human scale.



Vertical window expression with detailed surrounds. Note parapet detail .

2.10.4 ROOFS

Acceptable roof materials are;

- earth toned clay tiles,
- natural or reconstructed slate,
- copper or zinc.
- red, green. off white or grey colour bond,
- zincalume custom orb (subject to reflectivity limitations), and

Variations to this palette will be considered on their merit.

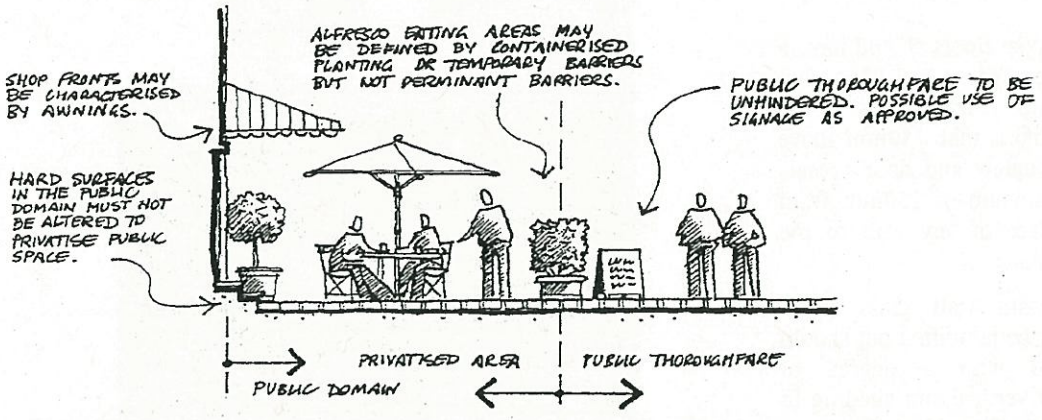
2.11 PLANTING

2.11.1 PLANTING

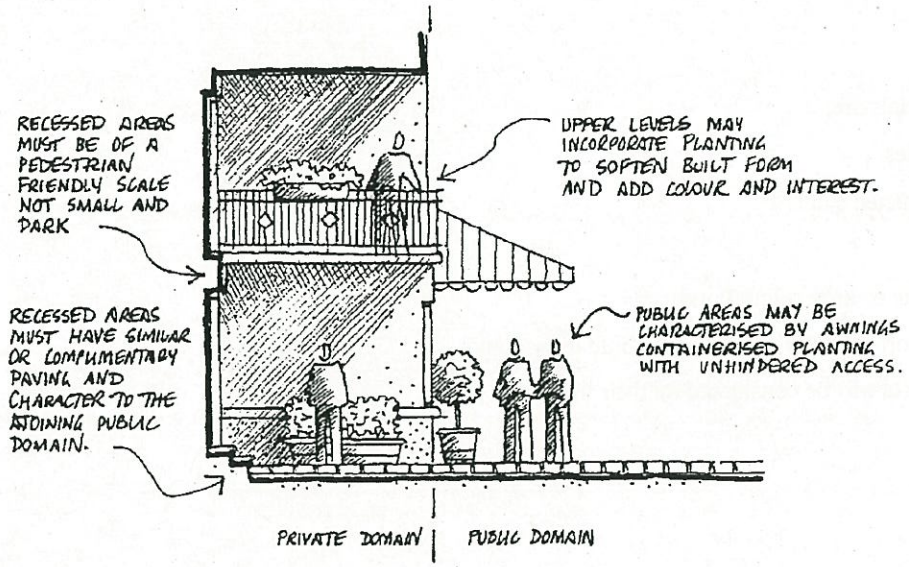
Generally, planting is encouraged for privately developed areas to assist in defining private space and complimenting the public domain's planting scheme and the square's design character eg: hedges, topiary

Planting shall;

- consist of species which correspond to and compliment species used in the public domain and create the intended cosmopolitan character,
- be of suitable scale to their intended function and surrounds,
- be easily maintainable and hardy, generally evergreen species are preferred,
- be maintained to good horticultural practice at the expense of the developer, owner or tenant,
- be held in appropriately sized containers which are free draining and in keeping with the character desired.
- where select corresponding or complimentary plant species and pots where desired which reinforce the intended character, and
- the use of plant material in suitable movable planters is encouraged to delineate private spaces or pedestrian thoroughfares and soften edges.



Planting to define pedestrian areas



Planting defines public and private domain

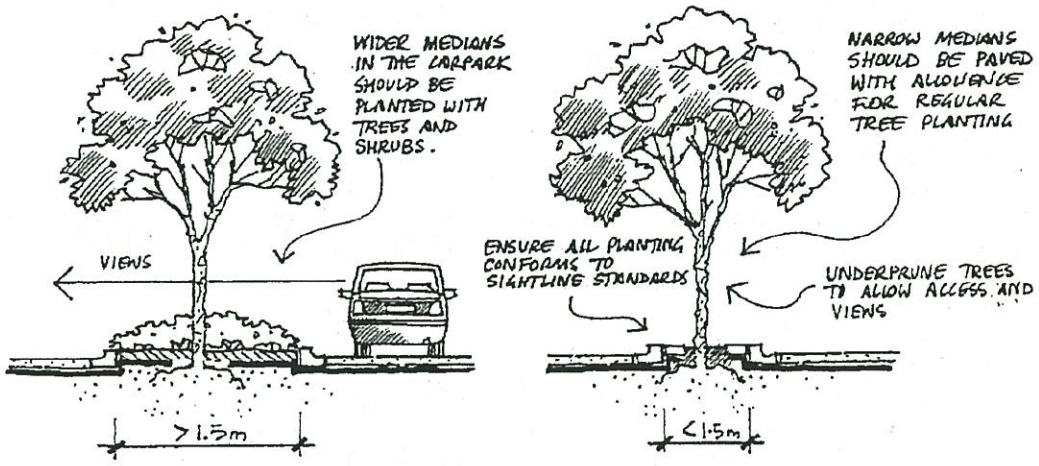


FIG 3.

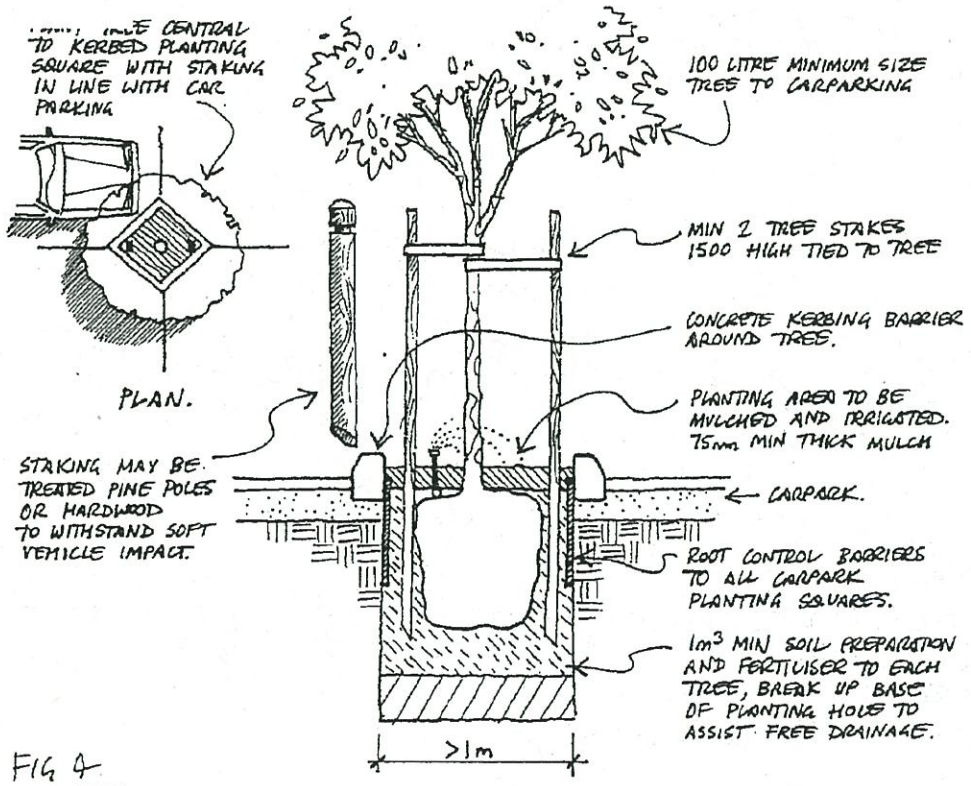


FIG 4

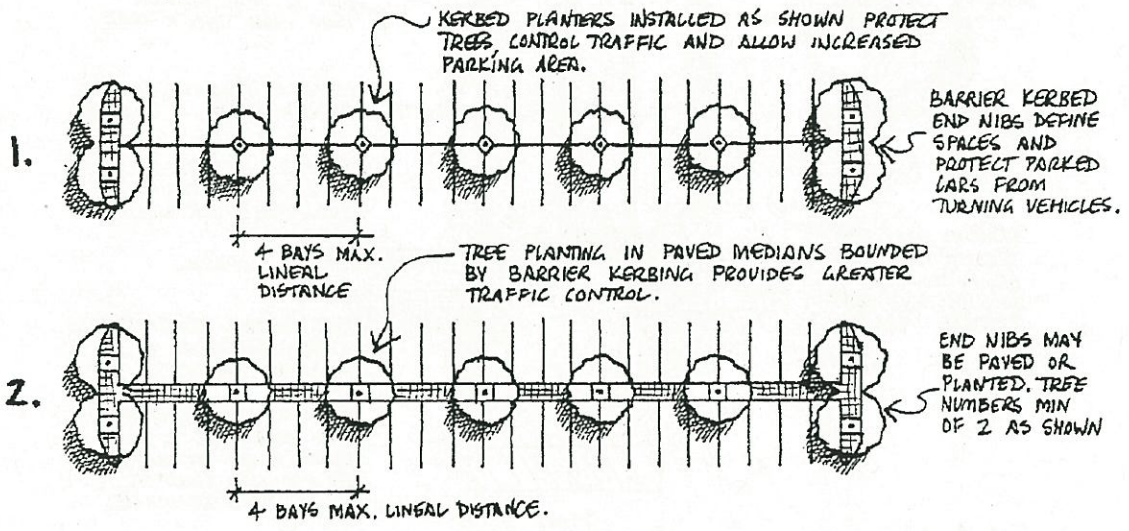
General planting specification.

2.11.2 CARPARK INTERNAL PLANTING

Carpark planting is critical to the visual appeal of the carpark areas as well as in providing shade, controlling access and softening an otherwise harsh environment. Carpark planting consists of two areas, perimeter planting adjacent streets and planters in the carpark itself.

It is essential that carpark planters be correctly constructed and prepared to best ensure the plants survival. The carpark planting shall conform to the following:

- provide minimum 100 litre pot size shade giving trees at a ratio of 1 tree per 8 carbays,
- planting shall consist of species which compliment the desired Cosmopolitan character of the precinct,
- trees shall be deciduous and able to be under-pruned to a height of 2.5 - 3m reducing vehicle conflict and enabling clear sightlines,
- be located in such a fashion to conform to all required standards relating to safe vehicle and pedestrian flow and preserving accepted standard sightline requirements,
- incorporate understorey planting where raised medians or traffic islands have an area greater than $20m^2$, smaller islands are to be paved,
- tree planting areas shall be at least $2m^2$ in size,
- all planting areas shall contain $1m^3$ minimum of imported black soil and be free of road base, bitumen, concrete, rock, limestone and the like,
- all planting beds shall be free draining to prevent ponding or saturation of rootballs,
- all trees shall be mulched and staked with a minimum of 2 x hardwood or treated pine stakes tied to the tree trunk,
- all vegetation shall be vigorous and healthy in growth and prepared and installed to good horticultural practice,
- understorey planting shall be designed to allow pedestrian access through or around at regular intervals as well as ensure all required sightline standards are achieved, and
- all small planting areas containing trees and surrounded by hard surfaces shall have some method of root control to prevent uplifting of hard materials.

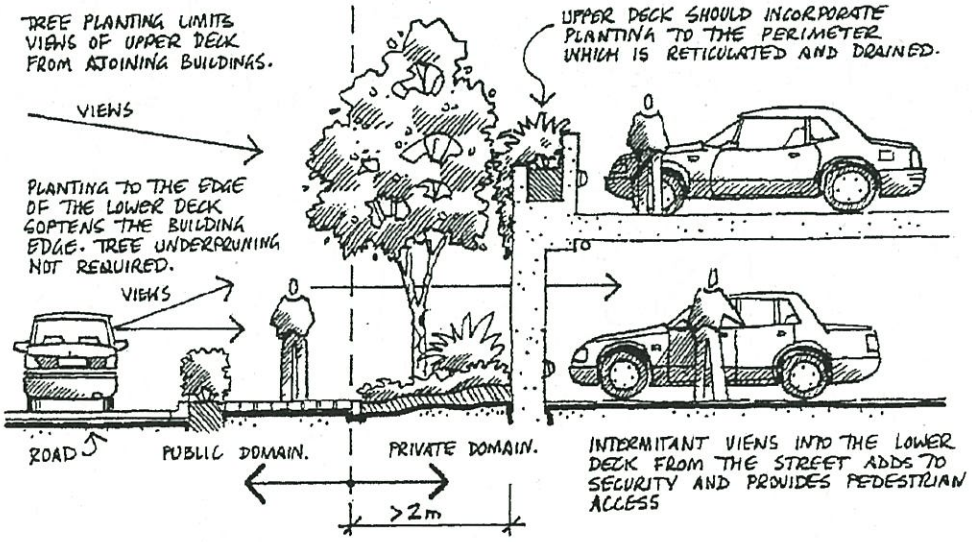


Required internal planting to carparks

2.11.3 CARPARK PERIMETER PLANTING

Planting around the carpark perimeter is essential to provide a soft landscaped setting for views from adjoining land uses and from within the retail precinct.

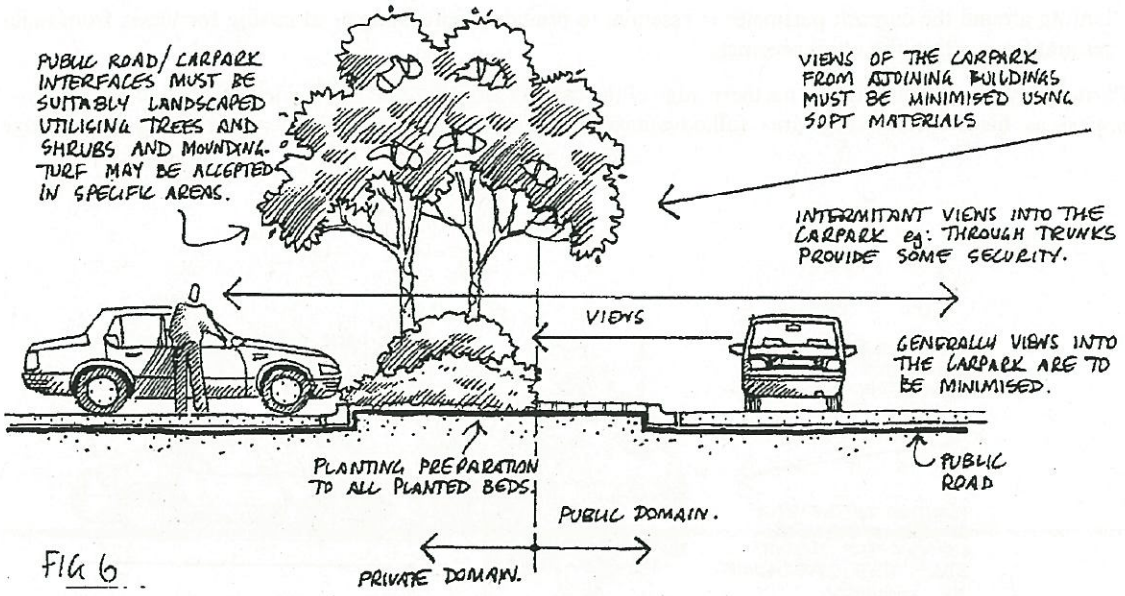
Particularly, landscaping to the northern edge of the carpark fronting the TAFE site is essential to the carpark's visual appeal. as this is a wider verge area, full advantage should be taken by the developer in landscaping this edge.



Planting treatment to decked carparks

Landscaping of the carpark perimeter shall conform to the following;

- 100 litre pot size shade giving trees at minimum 10m centres where tree planting is achievable.
- Shrub planting is preferable to the use of grass.
- All plant species shall reinforce or compliment the intended cosmopolitan character. Trees shall be mainly deciduous in nature and shrubs shall be evergreen and preferably flowering.
- All planted areas shall be suitably prepared using imported black topsoil, fertiliser, mulch and staking where required.
- Planting areas (other than grass) shall be boxed out to a depth of 1m for trees and 300mm for shrub areas generally. Boxing out of planting areas for shrubs shall encompass an entire bed not individual plants enabling provision of an appropriate amount of soil preparation.,
- All edges between planted and grass areas shall be bordered by continuous extruded concrete kerbing set flush with final grass levels. and
- All carpark perimeter planting shall conform to accepted vehicle sightline standards particularly at entries and exits. Planting shall enable views into the carpark from adjoining streets for security purposes.



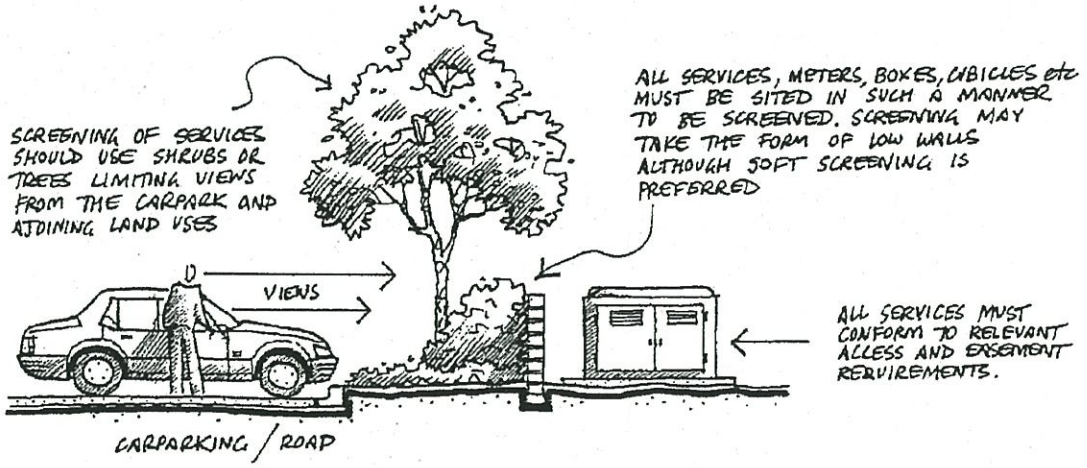
Required planting treatment of on-grade parking

2.12 SERVICES SCREENING

All services, cubicles, storage and deposit areas, transformers, shall be screened from view.

The provision of screening shall conform to the following:

- Screening shall be designed to allow free and easy access as required to enable maintenance and checking of facilities. This includes all relevant service authorities. Council, tenants or owners as required,
- Plant screening shall be of suitable height to limit views to service facilities and shall be evergreen in species,
- Screening and plant material species shall be selected to not have any adverse impact on the facilities operation,
- All plant material and areas shall be prepared and installed to good horticultural practice. Refer section 2.1.3 (Carpark Perimeter Planting),
- Services cubicles and boxes shall be painted in colours to limit their visual impact. Painting shall conform to required standards determined by the relevant services authorities. eg: Water Corporation, Western Power, Telstra etc.,
- While plant screening is preferred, walls or fences may be utilised where approved. Long or tall screening walls must be constructed of materials complimentary to the intended low visual impact and Cosmopolitan character in colour, texture, form and scale, and
- Service yards must be a min 2.4 high and located in positions that minimise impact on adjacent properties and tenancies.



Planting to screen service enclosures.

2.13 OTHER CONSIDERATIONS

2.13.1 SOLAR EFFICIENCY

Due consideration should be given to passive solar design. Reduced solar heat gain can be achieved through awnings. balconies, verandahs and fixed solar shading. These elements must be considered in terms of overall building design. and should not be tacked on after thoughts.

Habitable rooms should be located to gain maximum advantage from the winter sun.

Buildings shall have a minimum R2 insulation to walls and roofs.

2.13.2 RUBBISH BINS

A separate storage area for large PVC wheeled bins should be catered for at site planning stage. This area should be appropriately screened.

2.13.3 AIR CONDITIONERS

As air conditioners can often be noisy, it is important that they be located in areas that minimise the impact on the public domain and residential neighbours.

Roof and wall mounted air conditioners shall not be visible.

2.13.4 TV ANTENNAS, SATELLITE DISHES & RADIO MASTS

TV antennas are to be located within the roofspace wherever reception permits. Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

2.13.5 SOLAR COLLECTORS

Solar collectors must not be visible from the public domain and residential neighbours.

3. SPECIAL CONDITIONS

3.1 LOT ONE

The northern portion of Subiaco Station Precinct is deemed a highly desirable site for an anchor tenancy approximately 4000m² in size. This anchor tenancy will be ideally placed by virtue of its location on one of the new connections (Station Street) through to Jolimont and Wembley from Subiaco.

An anchor tenant located within the Station Precinct will attract shoppers and assist in supporting a range of specialty retail outlets located around the perimeter of the square.

A pedestrian route (Rokeby Walk) that links the square to a car park on the north of the site is required and must be on the same alignment as Rokeby Road. This pedestrian route shall be open to public access at all times and may be covered.

The development of Lot 1 should aim to create a Main Street Environment fronting Rokeby Walk and Station Square. An enclosed shopping shopping mall is not acceptable.

Any pedestrian route to open parking must be kept open and well lit at all times.

The entry to the anchor tenancy must be orientated towards Station Square having its primary entrance being visually recognisable, and no more than 8m from the square. Schemes that do not comply with this requirement will not be accepted.

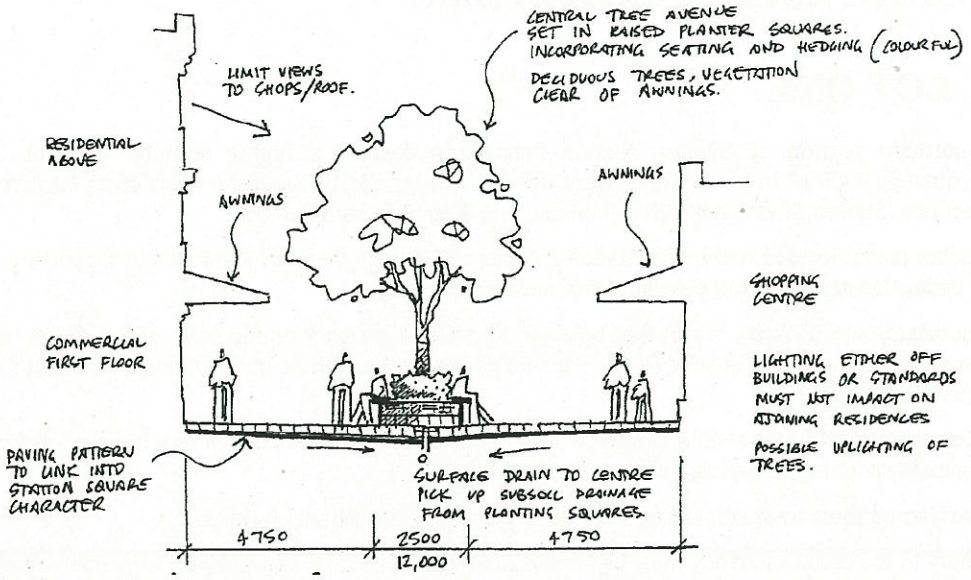
Shopping trolleys must be contained within Lot 1. Adequate trolley storage must be provided within the anchor tenancy site and associated parking areas. The developer shall ensure that devices and details are installed to effectively deter the transport of trolleys off the site.

3.1.1 PEDESTRIAN LINK

The pedestrian link performs a major function in providing pedestrian access to the retail sites from the carpark to the north and Station Square to the south. It's preferred location is on an axis line with Rokeby Road and as such its landscape treatment is essential to the precinct's success and character.

The pedestrian link must be designed to;

- allow for free and easy pedestrian access along and across it,
- allow for maintenance and emergency vehicle access into and through the pedestrian link, while restricting general vehicle access,
- incorporate a range of microclimate control measures such as awnings or roof and trees for shade, wind and rain protection..
- incorporate a range of contained plant material of appropriate species, location and scale to the space. Vegetation should generally incorporate some colour with deciduous trees allowing for winter sun to access pedestrian areas,
- accommodate planting which must be planted and maintained to good horticultural practice with appropriate preparation and selection of soil types, drainage, mulch and fertiliser,
- incorporate street furniture. It is essential to the space's success and must include an agreed number of approved seating and rubbish bins. (minimum 6 rubbish bins and 4 benches).
- allow for clear views along and across the pedestrian space for security purposes, and
- incorporate security lighting which does not effect adjoining residences or businesses.



Suggested hard and soft landscaping for Rokeby Walk.

3.1.2 PAVING WITHIN CARPARKING

- Generally, all small traffic islands must be paved with to compliment the desired Cosmopolitan character. Paving to islands must be segmented and should be colour contrasting to the vehicular surface.
- Carparking traffic islands and medians shall be edged with concrete barrier kerbing.

3.2 RAIL NOISE & VIBRATION

The Subiaco Redevelopment Authority and Westrail absolutely disclaim any responsibility for nuisance, noise and vibration caused by railway activity and patronage. Leasing contracts, land and building sales will be subject to Buyer Beware Clauses.

4. APPROVALS

4.1 ALL DEVELOPMENT

The Redevelopment Act states that the carrying out of any development within or partly within the Redevelopment Area requires the approval of the Authority.

Development is defined as :

(a) the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land;

(b) a material change in the use of land; and

(c) any other act or activity in relation to land declared by regulation to constitute development.

but does not include any work, act or activity declared by regulation not to constitute development (eg. maintenance work on government utilities).

Separate development approval from the City of Subiaco is not required although your application must be referred for comment to the City of Subiaco, the Town of Cambridge and relevant public agencies (such as Westrail) before determination by the Authority.

The usual local government Building and Health By-Laws remain in force and Licences must still be obtained, whenever necessary, directly from the City of Subiaco or the Town of Cambridge.

4.2 THE APPLICATION

An application for approval to commence development is required to be made by completing Form 1 (available from the SRA and Subiaco Council) and should be accompanied by such plans and other information as the Authority may reasonably require.

Generally the Authority will require the following information to be provided with an application for approval to commence development:

- a location plan to a scale of at least 1:500 identifying the land which is the subject of the application for approval to commence development:
- Six (6) copies of a plan(s) to a scale of at least 1:200 showing:

(i) the location and proposed use of any existing buildings and out buildings to be retained and the location and use of buildings proposed to be erected or demolished on the land;

(ii) the existing and the proposed means of access for pedestrians and vehicles to and from the land;

(iii) the location, number, dimension and layout of all car parking spaces intended to be provided;

(iv) the location and dimension of any area proposed to be provided for the loading and unloading of vehicles carrying goods or commodities to and from the land and the means of access to and from those areas;

(v) the location, dimensions, design and particulars of the manner in which it is proposed to develop any landscaped area, including the retention of existing trees and other vegetation, fences and walls;

(vi) plans, elevations and sections of any building proposed to be erected or altered and of any building it is intended to retain, including details of materials of construction, finishes and external colours;

(vii) a statement of, or plans indicating the impact of the proposed development on the streetscape, views, privacy and overshadowing;

(viii) a statement setting out details of the intended use and the way in which that use is proposed to operate;

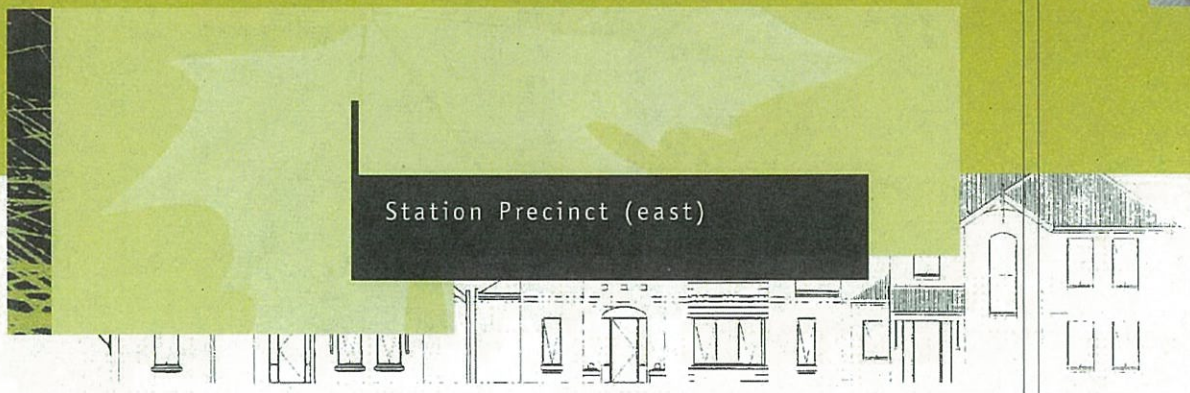
(ix) details of all signs and advertising structures; and

(x) any other plan or information required to be provided pursuant to the Redevelopment Scheme or which the Authority may require to enable the application to be determined (e.g disability audits).

(xi) A fee is required to be paid for any development application relating to land within the Scheme Area. The fee is scaled according to the value of the proposed development.

(xii) The Authority aims to determine all applications within 60 days of lodgement of which 42 days is allocated for consultation with the City of Subiaco and the Town of Cambridge.

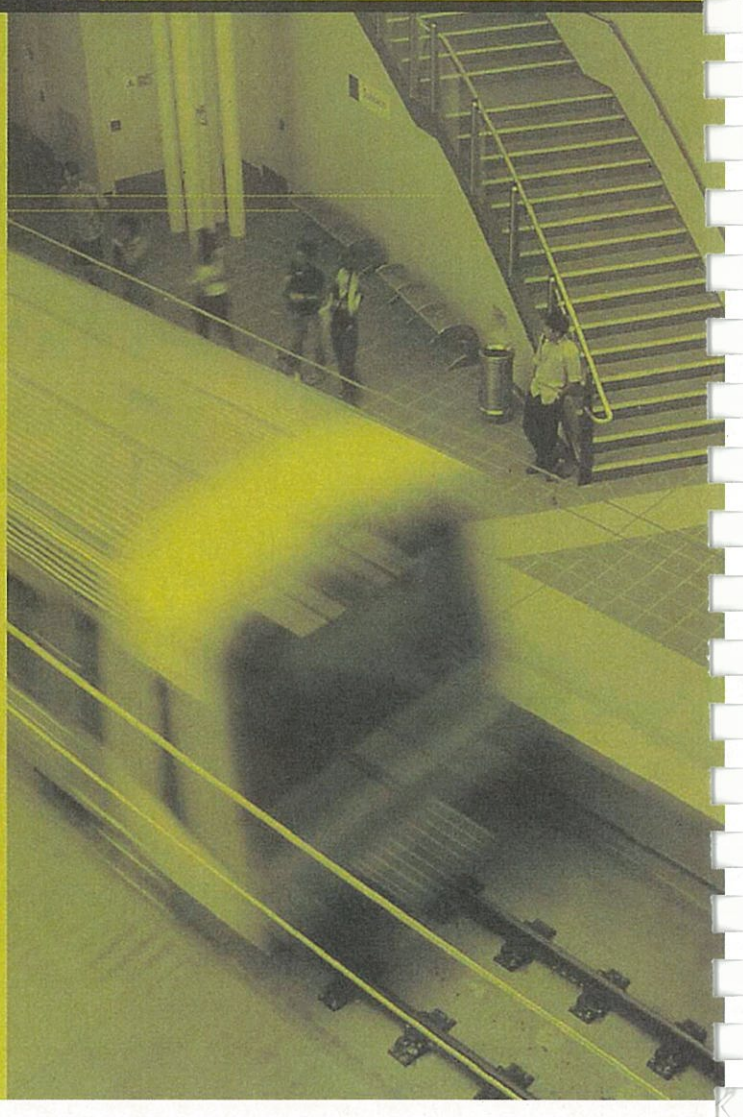
Subi Centro



Station Precinct (east)

Subiaco Park Design Guidelines

SUBI CENTRO
a place for all



Subi Centro has been developed to offer a stimulating urban environment to its residents within the Subiaco neighbourhood.

These design guidelines prescribe the standards and recommendations which will ensure that each residence of the Centro development will be a part of the community and that your property offers a valuable investment.

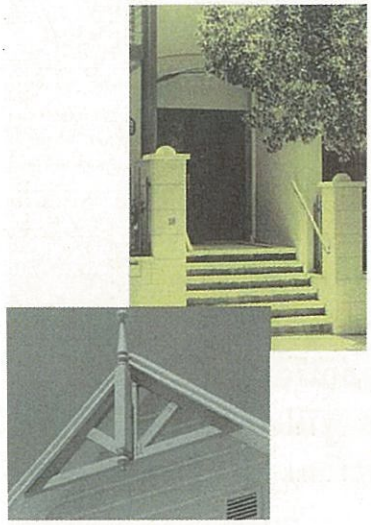
The development control provisions of this manual will be given full regard by the Authority in any development application. To depart from these provisions will require full and substantiated justification.

The provisions of this manual prevail to the extent of any inconsistency with the provisions of the Subiaco Redevelopment Planning Policies and the Subiaco Redevelopment Residential Design Manual.

1. HOUSING IN SUBI CENTRO

1.1 Being Neighbourly

Although not especially high, the general residential densities within the Subi Centro are greater than standard suburban locations. This density is to take the form of both smaller single residential lots, terrace housing and units. As density increases, being a good neighbour becomes all the more important, particularly with regard to the design of the building and its surrounds.



Building character, overshadowing, overlooking and landscaping are a few of the subjects to be covered by this manual, that when handled correctly in design and implementation terms, add immeasurably to the livability of the neighbourhood. After all, you are someone else's neighbour so if everyone does the right thing urban harmony should prevail.

1.2 Form and Character

The pattern scale and types of residential development that are characteristic of other successful streets and precincts in Subiaco ensure the high standard of liveability in those neighbourhoods. Generally it is important that;

- Housing forms reflect the relatively intimate, village like character of Subiaco, with a similar mix of styles and densities;
- Residential buildings should be orientated to the street whilst being designed in awareness of other issues of public/private spaces and interfaces and perceived and real security for users;
- The built form should be designed as clusters with smaller urban forms to break down the scale and imply incremental growth;
- Housing types are able to be adapted in the future to serve the evolving needs of the community; and
- Residential development is energy efficient and sensitive to the need for water conservation.

It is strongly recommended that new land owners or their architect/designer approach the Town Planners at the Subiaco Redevelopment Authority's with a concept plan at the earliest stage of design development to aid in expediting the planning approval process.

2. AREA COVERED BY GUIDELINES

These guidelines apply to all lots (342-374) east of Church Lane within the Station Precinct, as shown in Figure 1.

3. SITE PLANNING

Generally lot sizes range from 216m2 to 387m2. Approximately half the lots range from 189m2 to 231m2 (terrace style) with the remainder being single/duplex/triplex lots in the 231m2 to 387m2 range.

Amalgamation of lots (to form larger development sites) or subdivision of single house lots will not be permitted

3.1 Setbacks and Heights

Buildings must be setback within the parameters as detailed in Table 1 - Site Design Guidelines.

Development on lots 363 to 369 must have one boundary parapet wall (see Figures 1 & 2) which is setback 2 metres exactly from the park front boundary. It should also be noted that two storey parapets/boundary walls (above 3.5 metres in height) will not be permitted within the park front boundary 10 metre setback area. In addition 50% of the facade of the dwelling must be setback between 2 and 4 metres from the park front boundary. The remainder of the dwelling has a minimum park front boundary setback of 2m.

It should be noted that in measuring front setbacks, where a maximum setback must be met, the front facade of the development must read as being reasonably substantial. For example, an open verandah is considered inadequate, a good portion of the building's front wall must meet the maximum setback requirements.

Side setbacks

Side setbacks and permitted side openings shall be in accordance with the Residential Planning Codes of Western Australia although variations to these requirements may be supported provided the development:

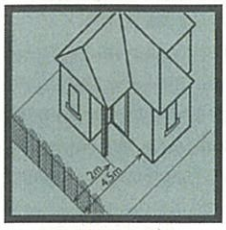
- Complies with the manual's solar access requirements; and
- Does not impinge on the privacy of adjoining properties.

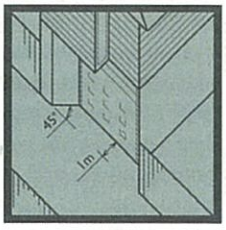
Development on terrace lots are encouraged to build from side boundary to side boundary. For details of required setbacks see Table 1 - Site Design Guidelines.

Development is permitted to the rear boundary excluding any services easements. Garaging on the northern boundary of Lot 343 must be setback 1m from the rear boundary (see diagram).

Building Height Limits

Building heights on lots within the subdivision vary according to the particular lot (see Table 1). Generally single/duplex/triplex and terrace style housing is limited to 2 storeys or 9m, or 3 storeys or 12m (whichever is the lesser) depending on location.





Building height is defined as finished site level to the highest point of roof. Variations to this height limit may be supported provided they are of a minor nature, such as chimneys and finials etc.

On lots 346 to 356 and lots 357 to 362 where 3 storeys (12m) is permitted, development within 7 metres of the rear boundary (garaging etc.) is limited to 2 storeys or 9 metres. Variations to these limits such as those outlined above may be supported. For details of building height limits see Table 1 - Site Design Guidelines.

3.2 Solar Access and Energy Efficiency

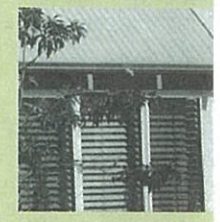
The house should be designed so that the most used daytime rooms are orientated to receive the maximum amount of northern winter sun whilst at the same time preserving solar access to adjoining properties. To this effect, no building shall cause more than 50% of an adjoining lot to be in shadow at noon on June 21 or reduce sunlight to the principal area of ground level open space of adjacent residential properties to less than three hours between 9am and 3pm on June 21.

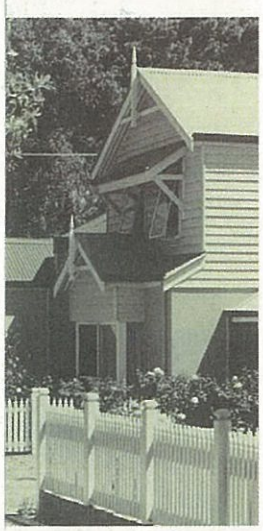
The upper floor or loft roof/ceiling should be constructed to achieve a minimal thermal resistance value of R2 and consideration should be given to thermal insulation and storage of walls and floors.

Windows should be orientated to capture prevailing breezes and be shaded in summer with such devices as awnings, eaves or a pergola.

3.3 Levels

Changing lot levels from those provided by more than 300mm will not be permitted. The dimensions and positions of all other retaining walls proposed should be provided with your development application.





3.4 Vehicles and Garaging

The Redevelopment Scheme requires each house to provide at least one covered car bay on site although it is preferable that two be provided. These car bays must be accessed from the rear lane/mews where provided.
Vehicle access gates, garages or carports in specified locations (see Table 1) must be setback 1m from the rear boundary with a 45o truncation from the structure to the boundary. Rooms above the garage may be cantilevered out to the boundary line. The floor level of the garage or carport (excluding grouped/multiple dwelling lots) must be within 200mm of the finished level of the laneway at the boundary.

4. BUILDING FORM

4.1 Appearance

It is intended that houses within the Subiaco Park subdivision will be representative of the 'New Style of Australian Housing' as has been built in Subiaco Gardens whilst incorporating some of the design elements of housing typical of Subiaco and parts of Wembley. New dwellings must be two storey, have similar volumes, proportions and details such as verandahs and fenestration patterns.

Your house must include elements such as pitched roofs (35-45 degrees), eaves, vertically oriented windows, verandahs , corrugated iron, stonework (limestone), red face brick, higher than standard floor to ceiling heights, verandahs and formal residential entries.

The dwelling should enable "eyes on the street, walkways, mews and public open space" for passive surveillance from living rooms and balconies. Development on lots 373 and 374 should incorporate elements/windows etc, to encourage such passive surveillance of the adjacent public accessway and parkland.

4.2 Plot Ratio

The maximum plot ratio for lots 346 to 356, 357 to 362 and 363 to 373 is 1:1. The plot ratio for all other lots in the subdivision is 1.33:1. Plot Ratio is defined by:
"the ratio of the gross total of the areas of all floors to the land area within the site boundaries and in calculating the gross floor area of all the floors the areas shall be measured including any walls but shall not include lifts, stairs or stair landings, machinery rooms, air conditioning rooms, equipment rooms, non-habitable floor space in basements, areas used exclusively for parking of wheeled vehicles at or below ground level, lobbies or amenities common to more than one dwelling or occupancy or private open balconies."

Additionally, livable areas within roof spaces will not be included in plot ratio calculations.
For details of maximum site coverage see Table 1 - Site Guidelines.

4.3 Railway Buffer Area Performance Standards

Lots located within 50m of the rail tunnel and/or within the 65dB(A) airborne noise contour (ANR) as shown on Figure 1, are required to comply with the 'Buffer Area Performance Standards' which are detailed in Appendices I and II. The objective of the standards is to ensure that development is constructed (building footings / walls & windows) in such a way as to reduce any likelihood of noise and vibration affecting dwellings. It should be noted that in the case of single/duplex/triplex dwellings, any required vibration isolation footing design measures are generally not beyond the scope of standard building construction techniques. A statement from an acoustical consultant/or consultants, expert in the assessment of vibration and ground borne noise, and expert in the assessment of air borne noise, certified engineer, confirming that these standards have been met will be required to be lodged at Building Application stage. (see Figure 1 where RV & GB = Vibration and Ground Borne impacts and ANR = Air Borne Noise).

4.4 Grouped and Multiple Dwellings

The grouped dwelling lots have been identified in Table 1 - Site Design Guidelines.

Development on Lots 343, 344 and 345 should address both/all street frontages, with the emphasis and main pedestrian entry being via Church Lane. Vehicle access to lot 343 should be via the lane on its northern boundary. Vehicle access to lots 344 and 345 should be via Tipperary Mews. Only one vehicle crossover is permitted on each of these lots.

Development on lot 342 should address Tipperary Mews and may wrap around the corner into Cashel Lane. Vehicle access must be via Cashel Lane.

Development on lot 374 should address Church Lane, Waterford Close and the park on its southern boundary. Vehicle access to the site must be via Clare Lane or the Church Lane Cul-desac. Retaining walls on site are limited to 1.8m in height and must match those materials used in nearby retaining walls. It is important that the building in some way addresses the adjacent pedestrian access way.

4.5 Roofscape

Roofs should generally be pitched between 35-45 degrees where visible from public areas, streets and mews with a shallower pitch acceptable for verandahs and canopies, small areas of skillion and flat roofs behind parapets. All roofs should incorporate overhangs, eaves of at least 300mm and where appropriate, verandahs.

As the use of roof space is encouraged, appropriately proportioned dormer windows (as shown) and skylights can add interest to the external appearance of a roof and break up its volume. The use of gables fronting the street (or park) is required adding further interest to the streetscape and your house. Hip roofs are generally not permitted.

4.6 Private Outdoor Space

Private outdoor open space is an important component of any residential development. Perth's climate allows for outdoor living areas to be utilised for much of the year, making it essential that these spaces are functional and relate to the size and activity areas of the dwelling.

These areas should be securely enclosed (fences & gates), clearly visible from the living areas of the dwelling to enable young children to play in a safe environment, one area not many smaller areas, and may be paved, grassed and include trees but may not include large planting beds. The area is not intended to be walled with a roof but may be covered with a pergola or weatherproof canopy. Depending on design, this space could be located on the first floor of a dwelling. The recommended minimum private outdoor areas for single dwelling lots (Lots 363 - 369) are:

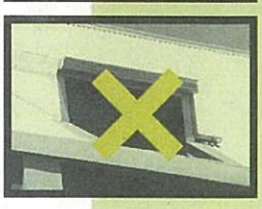
+ 30sq.m for a 2 bedroom dwelling;
+ 40sq.m for a 3 bedroom dwelling;
+ 50sq.m for a 4 bedroom dwelling; and

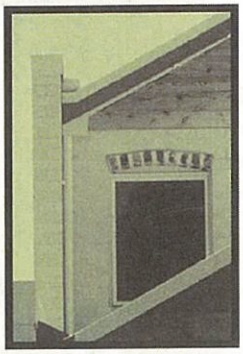
for terrace house lots the private open space should be:

+ 20sq.m for a 2 bedroom dwelling;
+ 30sq.m for a 3 bedroom dwelling;
+ 40sq.m for a 4 bedroom dwelling.

All of these areas should have a minimum dimension of 4m.

Dwellings within a grouped housing development at ground level are to be provided with private open space of no less than 16sq.m. All dwellings above ground level shall be provided with a private balcony of no less than 4sq.m with a minimum dimension of 1.5m, accessed directly off a living space.





4.7 Vehicle Access Gates, Carports and Garages

In some locations garages and carports may be required to be setback 1metre from the rear boundary to enable adequate manoeuvring space into the site. Habitable rooms may be built into the space above garages and may overhang this setback, extending out to the lot boundary.

It is important that garages (particularly doors), carports and parking areas be detailed to reduce their visual impact and add interest at ground level. Generally the materials used in the garage should match that of the house.

Grouped dwelling car parking should be integral to the fabric of the overall development and provide security for the tenants from the car to the dwelling.

Garage and carport details must be approved at the same time as the house even if it is intended not to construct them at the same time. The required storage area may be integrated within the carport.

5. MATERIALS

5.1 Walls

It is a requirement that exterior walls of houses (facing the street or other public areas) utilise traditional red brick or rendering and incorporate the use of detailing to break up large areas adding interest and individuality. The use of limestone, carved or shaped wood, weatherboard, steelwork, painted brickwork and different colours also adds to the interest and texture of the dwelling. Contact the Authority's Planners for colours and materials that are permitted within the Precinct.

5.2 Windows

Windows, particularly those that face the street, should generally have a vertical proportion. This design element adds to the objective of encouraging a vertical emphasis, an important factor when considering the size and width of the lots.

Detailing of the window frame itself and around the windows in the sills is encouraged . Whilst leadlight and patterned glass as a highlight is desirable, the use of tinted or reflective glass will not be permitted if able to be viewed from the street or public area. Remember, windows and glass doors facing the street can be whatever size is appropriate while windows on the side of your house will be required to be designed to take into account the issue of overlooking.

5.3 Roofs

Lighter coloured colorbond roofs (refer to SRA for approved colours) are permitted as are traditional terracotta (marseille style) coloured tiles. Other coloured tiles are not permitted. Zincalume will not be permitted as the reflective qualities can impact upon neighbouring lots.

6. LANDSCAPING

6.1 Front Gardens

Front gardens add a great deal of character to the streetscape. As the lots are comparatively small, the front gardens and courtyards of most lots will be quite small. Cottage type gardens would therefore be the most appropriate. The use of deciduous trees to add seasonal colour and permit sun penetration in winter is ideal.

The use of permeable paving (bricks etc) as opposed to concrete is preferred.

6.2 Recommended Plant Species

Trees

- Delonix regia (Poinciana)
- Erythrina indica (Coral Bean)
- Morus rubra pend. (Weeping Mulberry)
- Sapium sebiferum (Chinese Tallow Tree)
- Tipuana tipu (Pride of Bolivia)
- Ulmus parvifolia (Chinese Elm)

Shrubs

Sun

- Abelia 'x' grandifolia
- Agapanthus orientalis
- Buxus sp.
- Gardenia sp.
- Hebe sp.
- Plumbago sp.

Semi Shade

- Azalia sp.
- Camelia sp.
- Dicksonia antartica
- Fatsia japonica
- Hydrangea sp.
- Viburnum sp.

Ground Covers / Climbers

- Bouganvillea
- Hedera sp.
- Hardenbergia sp.
- Lantana sp.
- Wisteria sinensis
- Mandevilla sp.

Hedges

- Buxus heterophylla (English Box)
- Rosmarinus "Blue Lagoon" (Rosemary)
- Royena
- Plumbago auriculata

7. OTHER CONSIDERATIONS

7.1 Site Services

All site services (sewerage, water, power, gas and telephone) will be via the rear lanes and enter the property at a dedicated access easement approximately 1m by 1m in area. These easements are located in a rear corner of the lot to minimise intrusion on your development area and have been identified on Figure 1.

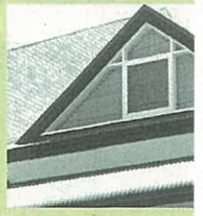
7.2 Fencing

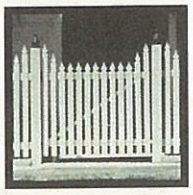
Low and open fences are traditionally used in Subiaco and create a valuable semi public space in addition to the street. However, as security is an issue it is recognised that the need for taller fences is legitimate. To achieve the same visual effect it is therefore important that your front fence be no higher than 1.2m and be at least 70% visually permeable.

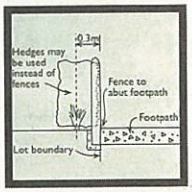
Fencing of the front of your lot can be achieved in a number of ways. Those preferred include open picket (patterned), limestone with infill panels of decorative steel (some high quality pool fencing may be permitted) or wrought iron, and even hedges are permissible.

Letterboxes should be incorporated into the fence and clearly show your house number.

Park front boundary fencing will be provided for Lots 363 - 373. This fencing cannot be extended or altered in any way. No direct access to the adjoining parkland will be permitted from these lots.







Side fences must be no higher than 1.2m within the front setback of the house and be constructed of the same or matching materials as those used in the front fence. Fibrous cement fencing (Supersix) is not to be used within the front setback area or where it can be seen from public areas.

For the remainder of the fencing on site there are no constraints except that where possible they should compliment the materials used in the house and be no more than 1.8m in height.

7.3 Rubbish Bins

A separate storage area for large PVC wheeled bins should be catered for at site planning stage. An alcove pick-up area should be located towards the rear of the lot as garbage collection will be via the rear lanes.

7.4 Lighting

Front yard and house front lighting is encouraged for both security and aesthetic reasons but care should be taken to ensure it does not shine directly into neighbouring properties.

7.5 Air Conditioners

As air conditioners can often be noisy, it is important that they be located in areas that minimise the impact on your neighbours.

Roof mounted air conditioners are often unsightly and should be located at the rear of your roof where they cannot be viewed from the street, public areas or public open space and not easily from your neighbours property.

Air conditioning units, pool filtration equipment, motors, pumps and mechanisms shall be suitably located and enclosed if necessary to comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

7.6 TV Antennas, Satellite Dishes & Radio Masts

TV antennas are to be located within the roof space wherever reception permits. Special planning permission is required for the installation of satellite dishes and radio masts. The Authority has a specific policy on these facilities and should be consulted at the earliest stage to establish under what conditions you may install such facilities.

7.7 Solar Collectors

Solar collectors must not be visible from the street or a public area. Should they be installed on the plane of the roof at the rear, ideally tanks are to be located within the roof space. If it is absolutely necessary to use a stand to change the angle of the collector then again it must not be visible from the street and not easily viewed from the neighbours property.

7.8 Clotheslines and Drying Areas

These should be located to maximise winter sunshine without being able to be seen from public areas.

7.9 Storage Area

Providing for outdoor storage space is important and most effectively done at the design stage. It is therefore a requirement that each house provide a secure storage area of at least 4m which is fully integrated into the dwelling or garage.

8. APPROVALS

8.1 All Development

The Redevelopment Act states that the carrying out of any development within or partly within the Redevelopment Area requires the approval of the Authority.

Development is defined as:

(a) the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land;
(b) a material change in the use of land; and
(c) any other act or activity in relation to land declared by regulation to constitute development, but does not include any work, act or activity declared by regulation not to constitute development (eg. maintenance work on government utilities).

Separate approval from the City of Subiaco is not required although your development application will be referred to the Council's of Subiaco and Cambridge for their comment prior to the Authority making a decision.

The usual local government Building and Health By-Laws remain in force and Licences must still be obtained, whenever necessary, directly from the City of Subiaco.

8.2 The Application

An application for approval to commence development is required to be made by completing Form 1 (available from the SRA and Subiaco Council) and should be accompanied by such plans and other information as the Authority may reasonably require.

Generally the Authority will require the following information to be provided with an application for approval to commence development:

+ six (6) copies of a plan(s) to a scale of at least 1:500 showing:

(i) the location and proposed use of any existing buildings and out buildings to be retained and the location and use of buildings proposed to be erected or demolished on the land;
(ii) the existing and the proposed means of access for pedestrians and vehicles to and from the land;
(iii) the location, number, dimension and layout of all car parking spaces intended to be provided;
(iv) the location, dimensions, design and particulars of the manner in which it is proposed to develop any landscaped area, including the retention of existing trees and other vegetation, fences and walls;

+ plans, elevations and sections of any building proposed to be erected or altered and of any building it is intended to retain, including details of materials of construction, finishes and external colours;

+ a statement of, or plans indicating the impact of the proposed development on the streetscape, views, privacy and overshadowing;

+ a statement setting out details of the intended use and the way in which that use is proposed to operate;

+ details of all signs and advertising structures;

+ any other plan or information required to be provided pursuant to the Redevelopment Scheme or which the Authority may require to enable the application to be determined.

A fee is required to be paid for any development application relating to land within the Scheme Area. The fee is scaled according to the value of the proposed development.

The Authority aims to determine all applications within 60 days of lodgement of which 42 days is allocated for consultation with the City of Subiaco and Town of Cambridge.

TABLE 1: SITE DESIGN GUIDELINES

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m)	Height (m)	Max. site coverage (%)	Side fence treatment	Railway zone	Parapet wall treatment	Other considerations
342	982	8	0-2	As per R Codes	-	12m or 3 storeys	80%	✔			See 4.4
343	936	8	0-2	As per R Codes	See 3.4	12m or 3 storeys	80%				See 4.4
344	750	6	0-2	As per R Codes	-	12m or 3 storeys	80%				See 4.4
345	750	6	0-2	As per R Codes	-	12m or 3 storeys	80%		See 4.3		See 4.4
346	387	3	0-2	As per R Codes	Nil	12m or 3 storeys	80%	✔	See 4.3		
347	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
348	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
349	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
350	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
351	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
352	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
353	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
354	216	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
355	189	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
356	256	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%	✔	See 4.3		
357	223	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
358	213	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3a		

TABLE 1: SITE DESIGN GUIDELINES cont

Lot No.	Lot size (m2)	No. dwellings per lot	Front (m) min-max	Side (m)	Rear (m)	Height (m)	Max. site coverage (%)	Side fence treatment	Railway zone	Parapet wall treatment	Other considerations
359	212	1	0-2	As per R Codes	Nil	80%	80%		See 4.3		
360	212	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
361	213	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
362	231	1	0-2	As per R Codes	Nil	12m or 3 storeys	80%		See 4.3		
363	284	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%	✔	See 4.3	See 3.1	See 7.2
364	232	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%		See 4.3	See 3.1	See 7.2
365	236	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%		See 4.3	See 3.1	See 7.2
366	235	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%			See 3.1	See 7.2
367	243	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%			See 3.1	See 7.2
368	231	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%			See 3.1	See 7.2
369	234	1	(park front) 2-4	See 3.1	(Clare Lane) Nil	9m or 2 storeys	70%			See 3.1	See 7.2
370	200	1	(park front) 2-4	Nil	(Clare Lane) Nil	9m or 2 storeys	70%				
371	200	1	(park front) 2-4	Nil	(Clare Lane) Nil	9m or 2 storeys	70%				
372	200	1	(park front) 2-4	Nil	(Clare Lane) Nil	9m or 2 storeys	70%				
373	321	2	(park front) 2-4	Nil	(Clare Lane) Nil	12m or 3 storeys	80%	✔			
374	1895	15	(park front) 2-4	See 4.4	See 4.4	12m or 3 storeys	80%	✔	See 4.3		

APPENDIX 1

BUFFER AREA PERFORMANCE STANDARDS

Vibration and Ground Borne Noise

"Any residential, retail, commercial or special purpose development with a building footprint falling within 50 m of the Westrail Tunnel centreline shall be required to demonstrate compliance with the vibration and ground-borne noise criteria set out below. Assessment shall involve a two-stage process comprising a Letter of Opinion, followed by a detailed Assessment Report. Both the Letter of Opinion and the Assessment Report shall be prepared by an experienced acoustical consultant, to the approval of the Subiaco Redevelopment Authority.

The Letter of Opinion shall be submitted with the Development Application and shall address the probability of compliance with the criteria set out below and whether mitigation measures are likely to be required.

The detailed Assessment Report shall be submitted with the Building Licence Application. This report shall document the existing vibration levels from trains, the predicted vibration and noise levels within the most affected areas of the development and the procedures used to determine these levels. The report shall also include a full description of any mitigation measures required to comply with the criteria.

The vibration criteria are expressed as Vibration Dose Values (VDV), as defined in Appendix A of British Standard BS 6472-1992. The ground-borne noise levels are expressed as A-weighted decibels (dBA), as defined in Australian Standard AS 2107-1987 "Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors". The criteria are:

Application		Maximum VDV (m/s $^{1.75}$)	Ground-borne Noise[1] (dBA)
Residential - Day (7.00am - 11.00pm)		0.2	40
Residential - Night (11.00pm - 7.00am)		0.13	40
Commercial	- General Retail	0.4	60
	- Prestige Retail	0.4	50
	- Office etc	0.4	45
Special Purpose	- Hospital Ward	0.13	35
	- Hospital Operating Theatre	0.13[2]	35
	- Other	Refer to SRA[1]	Refer to SRA[3]

Notes:

1. Typical maximum noise level (90% confidence limit).
2. For hospital operating theatres, the vibration velocity shall have an additional criterion of 0.1 mm/s (RMS, 1 second).
3. For other special purpose buildings, the consultant may offer a proposal for criteria (with references) for consideration by the SRA.

APPENDIX II

BUFFER AREA PERFORMANCE STANDARDS

Air Borne Noise

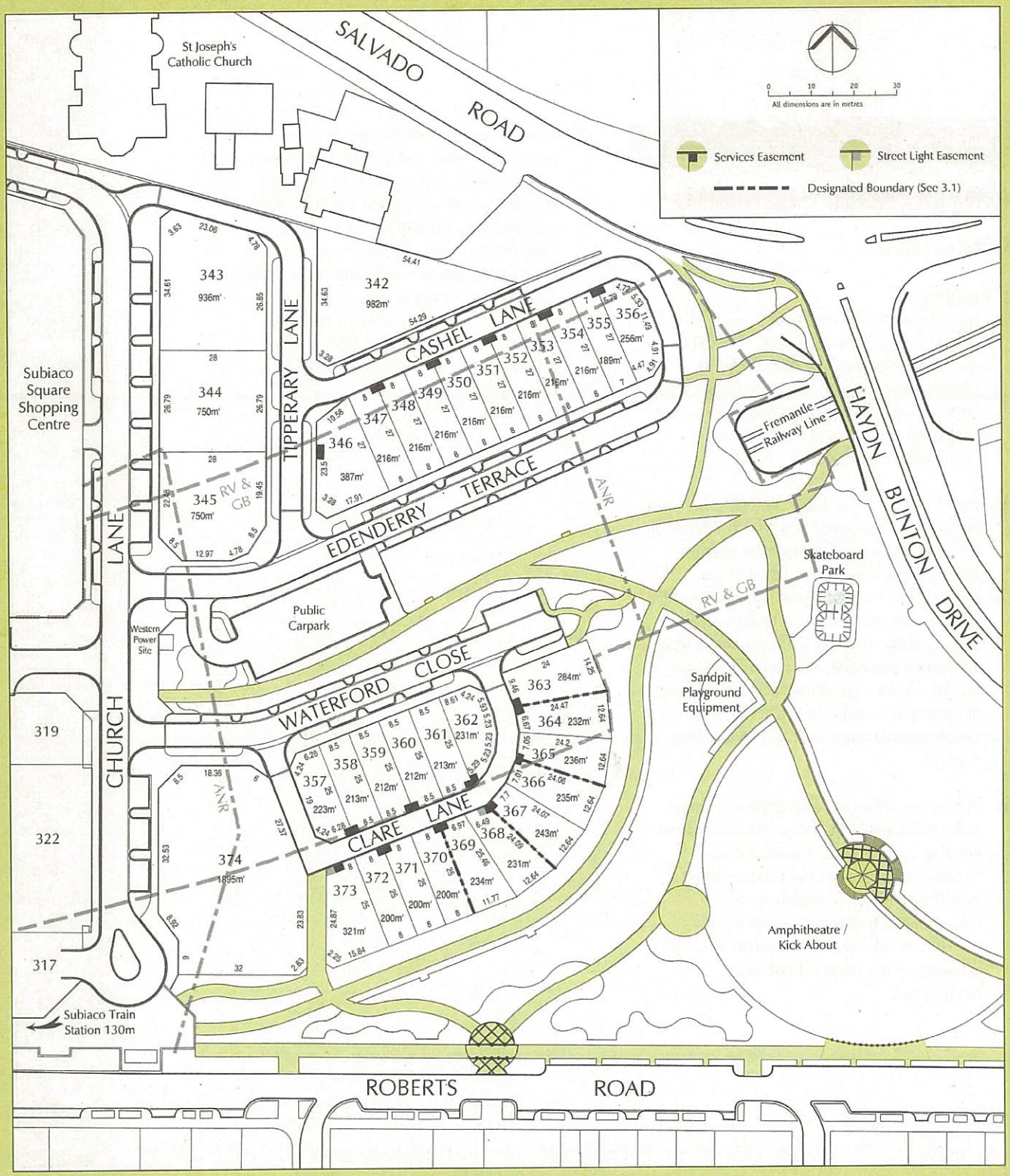
1. Residential

(a) For train noise, the developer is required to comply with an internal LAmax of 45dB(A). (As determined from the Department of Environmental Protection - Draft Impact Policy for Road and Rail Transportation Noise, dated 10/11/97) in respect of all residential developments on the Land.

(b) Within the 65 dB(A) noise contour, train noise received at a residential premises comprised in the Land may exceed the internal design criteria depending on the nature of the Building construction. Developers are required to obtain an acoustical consultant's report demonstrating that the Buildings construction adequately attenuates noise emissions from suburban passenger trains travelling at speeds of up to and including 90km/hr and that the LAmax internal noise level will be less than 45dB(A).

(c) Outside the 65dB(A) noise contour, internal noise levels would be acceptable with normal building construction. For residential buildings comprised in the Land requiring a specific acoustical environment, it is recommended that the developer obtains advice from an acoustic consultant as to the adequacy of the proposed building construction.

(d) In all cases, when developing the Land for the purposes of residential premises developers need to satisfy themselves that the above criteria are still appropriate and have not been superseded by the requirements of any Relevant Authority. Where the criteria have been superseded, the last standard or criterion shall be used in the design as is applicable at the date on which the relevant approval required from a Relevant Authority to the construction of any residential Building is obtained by the developer.


St Joseph's Catholic Church
SALVADO ROAD
All dimensions are in metres
Services Easement
Street Light Easement
Designated Boundary (Sec 3.1)
Subiaco Square Shopping Centre
TIPPERARY LANE
CASHEL LANE
EDENDERRY TERRACE
Fremantle Railway Line
HAYDN BUNTON DRIVE
Skateboard Park
RV & GB
Public Carpark
Western Power Site
WATERFORD CLOSE
CLARE LANE
CHURCH LANE
Sandpit Playground Equipment
Amphitheatre / Kick About
Subiaco Train Station 130m
ROBERTS ROAD
343
936m²
342
982m²
344
750m²
345
750m²
346
387m²
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
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365
366
367
368
369
370
371
372
373
374
1895m²
319
322
317

FIGURE 1

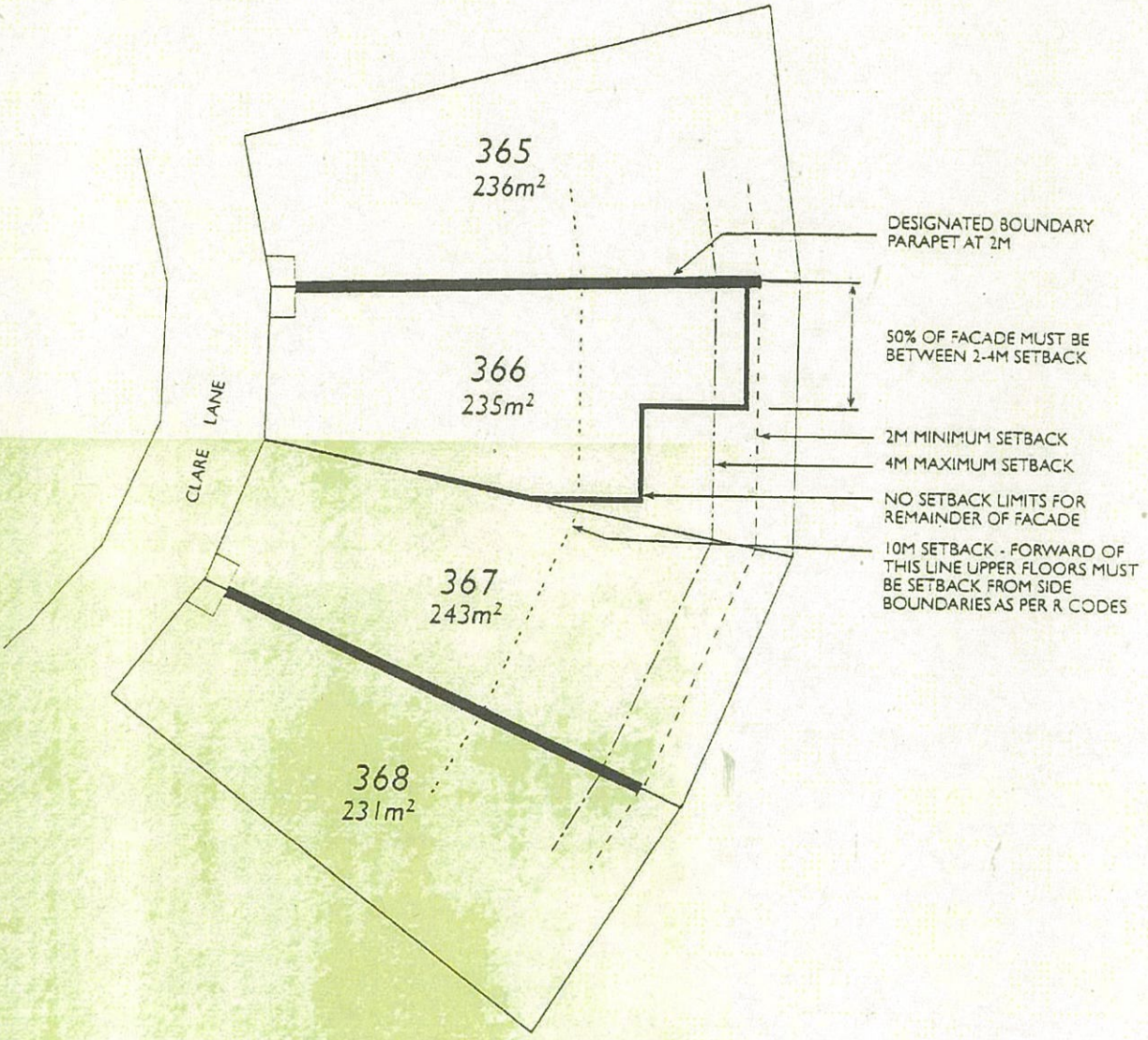
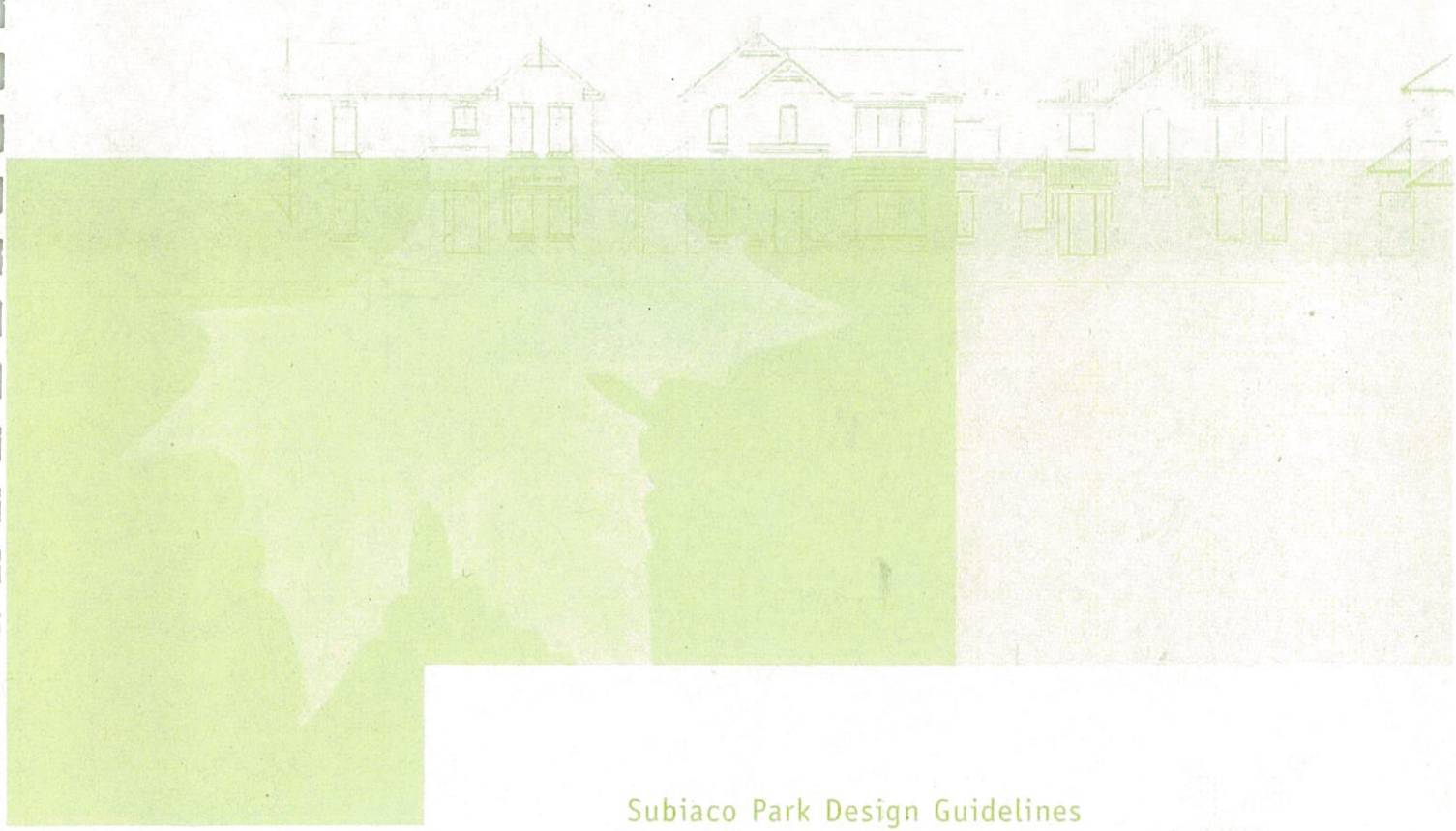

365
236m²
366
235m²
367
243m²
368
231m²
CLARE LANE
DESIGNATED BOUNDARY PARAPET AT 2M
50% OF FACADE MUST BE BETWEEN 2-4M SETBACK
2M MINIMUM SETBACK
4M MAXIMUM SETBACK
NO SETBACK LIMITS FOR REMAINDER OF FACADE
10M SETBACK - FORWARD OF THIS LINE UPPER FLOORS MUST BE SETBACK FROM SIDE BOUNDARIES AS PER R CODES

FIGURE 2



Subiaco Park Design Guidelines

Further information on any aspect of these guidelines
can be obtained by contacting the Authority's Town Planners on 9388 3449.

SUBIACO REDEVELOPMENT AUTHORITY
17 Hood Street Subiaco WA 6008

Telephone 9388 3449
Facsimile 9388 3412
sra@iinet.net.au

SUBIACO
REDEVELOPMENT
AUTHORITY

GOVERNMENT OF
WESTERN AUSTRALIA