

ATTACHMENT E

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**URBAN DESIGN STUDY AND
LANDSCAPE FEASIBILITY STUDY
(BY CLOUSTON ASSOCIATES)**



ASHMORE PRECINCT DRAFT DCP REVIEW URBAN DESIGN STUDY AND LANDSCAPE FEASIBILITY STUDY

23rd March 2006

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FRONT COVER SOURCE:

Figure 1: Land to which this plan applies

Draft South Sydney Development Control Plan Amendment:

Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct

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ASHMORE PRECINCT DRAFT DCP URBAN DESIGN STUDY AND LANDSCAPE FEASIBILITY STUDY



Report prepared for City of Sydney Council

by;

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INTRODUCTION

PURPOSE

CLOUSTON associates were commissioned by the City of Sydney to firstly undertake a review of the *Draft South Sydney Development Control Plan Amendment: Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct* as exhibited for public exhibition. Where required, CLOUSTON will provide comment to enhance the content to ensure the control has the ability to assist in delivering the positive outcomes desired for Ashmore and the wider Erskineville and Alexandria areas.

The second objective of this commission is to undertake an urban design study to further investigate two issues, these are:

PART 1 - Erskineville to Sydney Park linkages.

The proposed DCP aims to provide north south linkages to connect two very important public outdoor spaces through,

- a) a new corridor formed by the extension of Goddard Street and
- b) a proposed street located in a north south orientation.

This study investigates the feasibility of these two proposals plus the potential to enhance the existing Mitchell Road linkage with a number of detailed options for consideration.

PART 2 - Proposed Commercial Precinct

The draft DCP nominates a retail focus to the corner of Mitchell Road and Coulson Streets. The proponent (Macquarie Goodman) for part of the study area has suggested an alternative location for the commercial precinct north of the extended MacDonald Road.

The aim is to investigate the feasibility of both options in an urban design sense taking into consideration the major impacts of the flooding issues.

Through the preparation of concept plans for each location a recommendation is to be reached on the future location of this precinct.

BACKGROUND

CLOUSTON Associates have previously undertaken open space requirements and structure plan studies to assist the City of Sydney Council in developing the Draft DCP.

A report on flooding and WSUD initiatives has been recently completed by Cardno Lawson Treloar Pty Ltd. This report details the present and future constraints of flooding which has a large impact on the built form. There are a number of options proposed that require consideration to ensure the potential value of the land is realised and assists with issues surrounding the site.

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DRAFT DCP REVIEW

CLOUSTON Associates have undertaken a review of the *Draft South Sydney Development Control Plan Amendment: Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct*.

The following section describes a number of concerns and suggestions resulting from this review of the draft DCP. Each page is listed with bullet point comments relating specifically to that page.

General comments

- All of the controls could benefit from a basic sketch to help explain the outcome that is trying to be achieved. These could be simple black and white thumbnails.
- Development scenarios – have any mock development scenarios for development sites been undertaken to see how the controls interact. If not this would be a useful investigation.
- Table of definitions could be provided unless contained in the South Sydney DCP.

PAGE	COMMENT
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3	Objectives
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- | | |
|--|---|
| | <ul style="list-style-type: none">- Sense of place could be more specific – what is it that is trying to be achieved.- High quality design could be improved with more specifics such as, articulation, building to masonry ratio, roof forms, interaction with the public domain. |
|--|---|

6	Structure Plan
----------	-----------------------

- | | |
|--|---|
| | <ul style="list-style-type: none">- Private open space potentially too large. This is particularly the case when you consider that Sydney Park is directly down the road and there is a large urban park proposed in the site as well.- Would some of the area nominated as private open space i.e. courtyards and some be communal open space as well such as a BBQ area etc.- Permeability of site could be improved by continuing some of the smaller roads through to Mitchell Road.- While it is understood that Council is not wanting to create “rat runs” this greater permeability can be achieved with narrow lane ways that are not so easily used as a rat run, or maybe visual and pedestrian links.- Following from the above, some of the block lengths on the site are considered to be potentially too large and will promote a monolithic non fine grained development outcome.- There are many blocks nominated as residential flat buildings (RFB) which should be reduced. The remaining should be mixed used with a predominance of residential, but not labelled “flat Buildings” as this will not assist in achieving the built form with reference to the historic values of the surrounding neighbourhood.- RFB’s will not provide active street frontages to those streets bounding the community park. It is important that this park is central to the community supported by community facilities and retail such as cafes and restaurants.- Is the density that is created sufficient to achieve the dynamics of a true mixed use urban village – should the heights and building footprint be greater? |
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Colours, textures and materials can enhance the fine grain desired.



Open visual connections provide for public surveillance of the street.



Avoid repetitive fencing which causes a barrier to addressing the street.



Set backs provide opportunity for front yard landscape.



DRAFT DCP REVIEW

7 Land uses

- The term 'mixed use' is bandied about. While the land is zoned 10 Mixed Uses, the focus to the mix of uses is horizontal. That is there is a requirement of residential with commercial next to it. Perhaps there can be a greater consideration of a vertical mix of uses which will achieve a much greater dynamic and ground level activation. A specific control re horizontal / vertical mix of uses could be included.

10 Height Map

- 0 metres height limit in private open space is not appropriate. What about structures such as gazebos or shade structures above a BBQ area such as you may have in a communal open space area.
- Are the heights / density sufficient to develop the sort of dynamics that are proposed?

11 7.2.4 Built Form e)

- Consider the addition of required set backs to front of verandah and the provision for front yard landscape treatment and fencing.

12 Separate section for fences is required.

- This should provide clear height limits and design solutions for how fences in residential developments can work (sketches here would be appropriate). Some of the recent development at the corner of Eve and MacDonald Streets is evidence of inappropriate front fences which do not allow views through to the street, enhance community involvement, or provide the opportunity for variation in colour, texture and materials.
- Suggest to use photos to illustrate requirements such as those on this page.

13 Indicative built form map

- See comments above about excessive Private and communal open space.
- Flooding implications at the corner of Mitchell and Coulson will have potentially high cost associated with waterproofing and mechanical flood prevention devices.

14 Setbacks

- Terrace - Street setback is contradictory with page 11.
- Building Splay – further detail on this is required, is it 45 degrees and what is the length of the splay? Is this explained in the DCP?

15 Urban Grain

- The examples of terrace housing should be located in 7.2.4 e).

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DRAFT DCP REVIEW CONT.

16 Building finishes

- Face brickwork / timber / stone finishes needs to be explained further – not clear. State timber and stone materials for outdoor spaces.

17 Deep soil planting

- Types of trees to be planted in the deep soil planting area could be specified. List to be provided of species appropriate to climate and context would be helpful.
- Street tree plan is required showing what trees are to be planted on what streets.

20 7.5.1

- Park as a detention basin – while this practice is appropriate it is also appropriate to provide some limitations on the design of this park to ensure that it is high quality despite being a detention basin.
- Point (d) does not seem to fit in here

21 See comments later in this report

27 Community facilities

- Further detail on the implementation of this needs to be provided. How will it work what are the type of community facilities required, libraries etc?. Can developers provide funds to a council facility through Section 94?

31 7.10.4 d)

- Consider removing this item to achieve a more permeable network.

33 Figure 25

- Key should read subdivision, not street layout.

34, 35 7.10.7 Figures 26 & 27

- The section and plan is not clear to read.
- Street trees should be planted in swales not in paving.
- The swales should have regular paved access routes across grass for ease of access to parked vehicles and street crossing.
- Services conflict with trees.
- Suggestion of the location of the two storm water pipes under this road should be shown.

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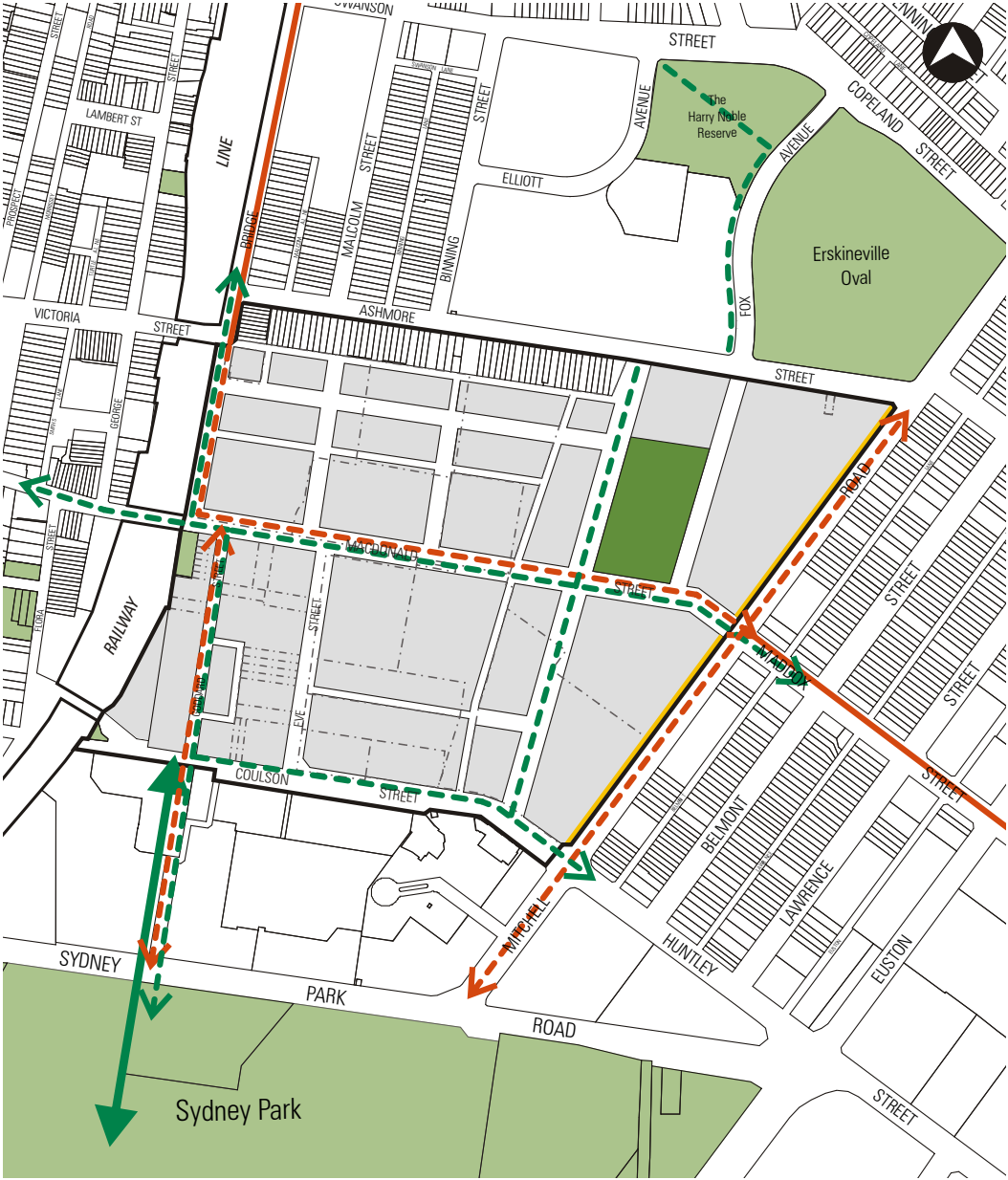
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DRAFT DCP REVIEW CONT.

36,37 Figure 28, 29

- Again section and plan not clear to read.
- Concerns over the swales suggested for the local streets as they reduce the on street parking which will be required for visitor and resident parking. They will become maintenance problems as people will park on them because of a flush kerb at the road edge.
- It might be more appropriate to collect the stormwater traditionally and store it in a tank for use it for irrigation to public parks and street trees.

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- proposed public open space
- existing public open space
- proposed development blocks
- existing regional cycle route
- proposed regional cycle route linking to cycle network
- proposed green corridor linking to existing park through the estate
- potential future open space links
- existing lot boundaries
- 3m setback cycleway dedication

SOURCE: Draft South Sydney Development Control Plan Amendment: Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct

PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES

THE WIDER CONTEXT

The two main issues of interest are to provide a green link between Erskineville Oval and Sydney Park. Secondly to provide a cycle way and pedestrian network that promotes these activities. The design outcome should be such that they enhance the environment and amenity of the area whilst functioning successfully as integrated elements.

GREEN LINKS

Green links in an urban setting are important but regularly exist in the canopies of street trees.

The required width of a corridor to support native species is large and is inappropriate to dense urban areas and they are usually maintained as a park not a habitat. If sufficient land is available to include wetland and storm water treatment systems these can be of benefit.

There is no data to suggest that any green link should be provided to enhance existing or future ecological communities in either Erskineville Oval or Sydney Park, except for tree canopies.

Considerations into the selection of native tree species to provide a food source and structure for roosting to attract native birds and bats should be included in the DCP / Street Tree Master plan. It is our view that the green corridor should be focused on the street network with good street trees and linkages, cycle way and pedestrian route between them.

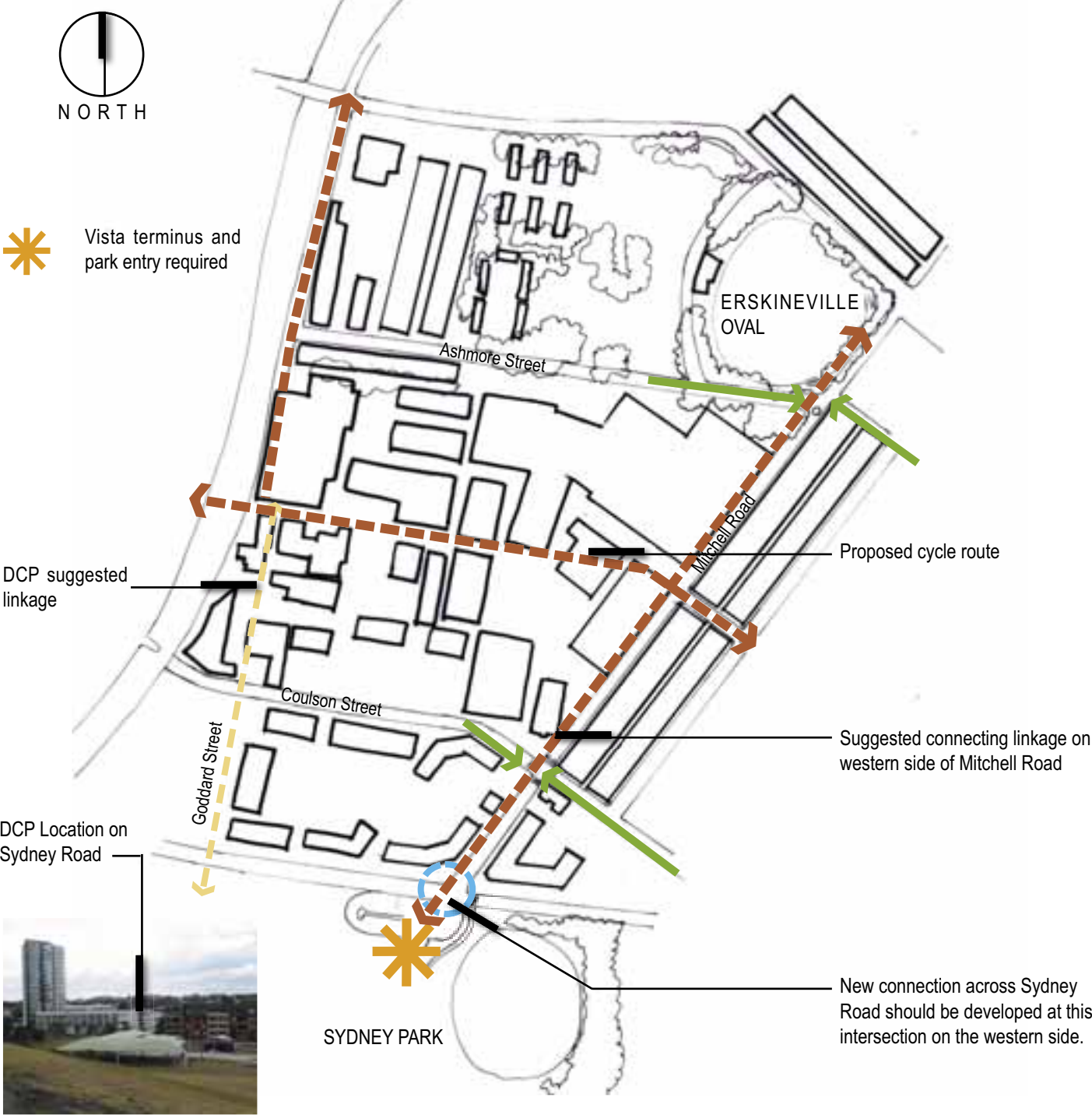
CYCLEWAY AND PEDESTRIAN NETWORK

When designing for a cycle / pedestrian shared zone it is important to understand how it links into the wider context, who would use it and what function will it serve.

Arup Consultants have been commissioned to prepare a cycle strategy for the City of Sydney which is currently in draft form and provides this information. For the purposes of this study we have assumed that the potential cycle routes are as shown in the Draft Cycle Plan opposite and will form the basis of our argument as to why a cycle way should be developed and where.



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Potential cycle routes

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PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES CONT.

LINKAGES PROPOSED IN DRAFT DCP

The proposed link as documented in the Draft DCP as an extension of Goddard Street has merit especially with a strong connection to Erskineville as suggested, but is subject to a number of constraints that will limit its success, these are;

- Existing building and property on Coulson Street is a large constraint in the ability to provide direct access and sight lines as desired.
- There is a considerable change in level from Sydney Road to Coulson Street (8-10m) which would require long ramps to provide reasonable disabled access between the two.
- Privacy / safety issues with existing residential either side and has little passive public surveillance.
- There is no existing crossing at this point on Sydney Road and the best option would be to install new traffic lights to allow both cyclists and pedestrians to access Sydney Park.
- This link may or may not be developed and should not be relied upon as the main access across Sydney Road.
- A real opportunity exists to provide this type of connection at the intersection of Mitchell Road and Sydney Road. This potential is two fold, firstly this connection is at ground and is accessible to most people on a legible route and provides for a large population living and working east of the rail line in Erskineville. Secondly, it provides the opportunity to enhance the urban qualities of Mitchell Road which sets it apart from the rest establishing a greater character for the area
- There is an existing shared cycle way / pedestrian zone on the eastern footpath of Mitchell Road but is considered dangerous due to its width of 2.4m and the proximity to entrances of residential properties.
- Recent developments to the south west known as Sydney Park Village have been set back and now is the time to decide set backs for Ashmore that could provide space for cycle and pedestrian linkages.



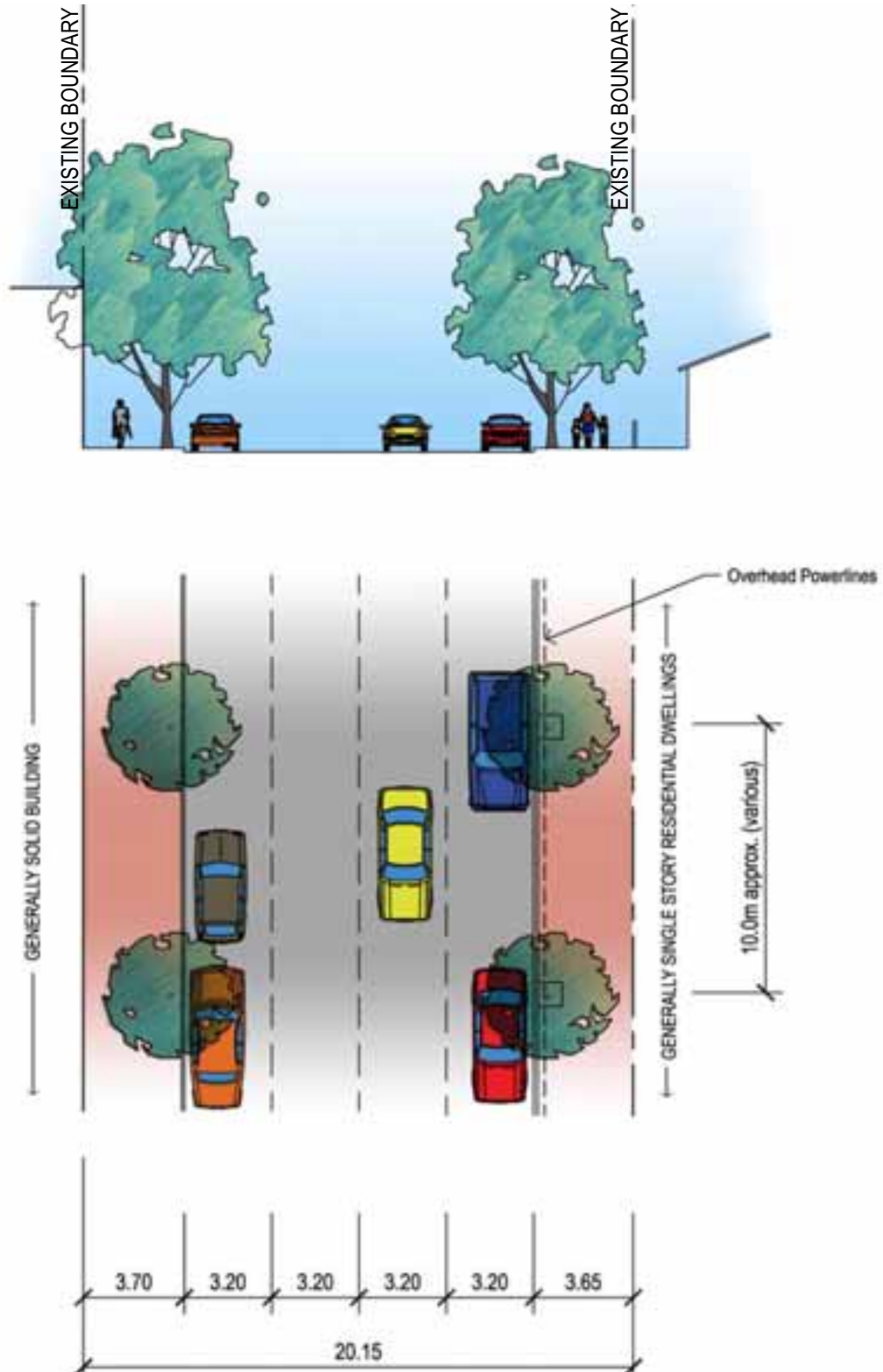
View from Sydney Park to potential link as suggested in DCP.



View of suggested link from Sydney Road looking north.

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EXISTING CONDITION



PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES - MITCHELL ROAD

EXISTING CONDITION CONFIGURATION OF MITCHELL ROAD

The plans / sections and photos on this page illustrate the existing spacial configuration of Mitchell Road. The street section is reasonably consistent from Ashmore Street to Coulson Street, but changes between Coulson Street and Sydney Road.

- Whilst the recent development have been set back from the previous road boundaries at Sydney Park Village, there are number of elements that have been installed in the road reserve that will restrict the development and ultimately the success of this potential new link.
- Recent road engineering has failed to maintain the previous kerb alignments which are still consistent with the street to the north, there by reducing the land available for footpaths, cycle ways and street tree planting. The result is that the street trees have been planted closer to the properties than others in the street, and the kerb is also closer to the boundaries, both barriers to achieving a continuous boulevard along the western side of Mitchell Road. This section of the road will be required to be adjusted to be consistent with the road to the north.
- No pedestrian crossing exists on the western side of the intersection at Sydney Road, but could easily be installed.
- A pedestrian crossing exists to the eastern side of this intersection but is not visible from Mitchell Road and does not engage the user to explore further. A terminus to the vista down Mitchell Road is required to stimulate the user to want to visit Sydney Park and that it is part of this community, not an island by itself.



Additional elements located in road reserve



Terminus required

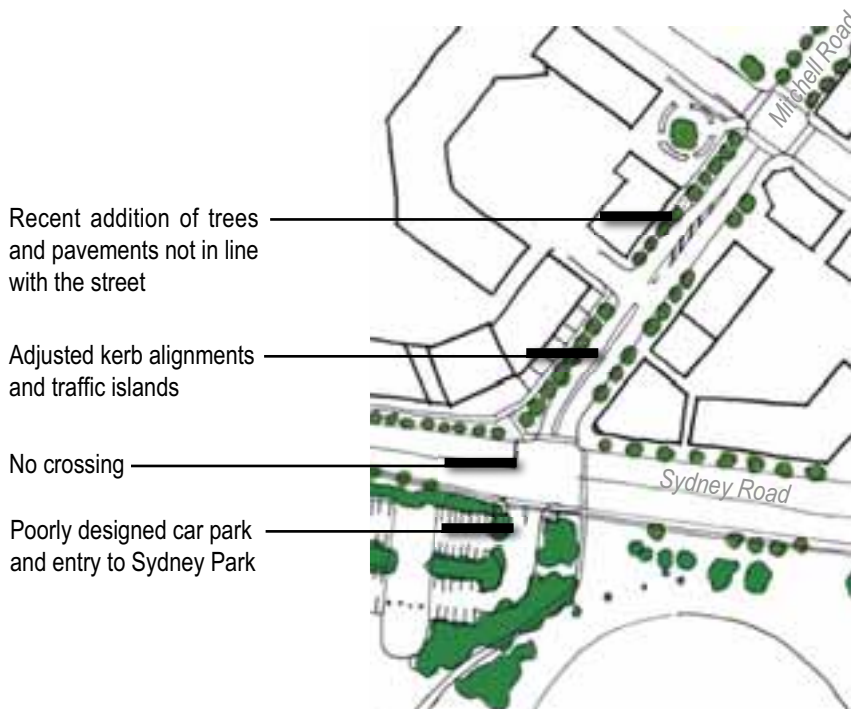
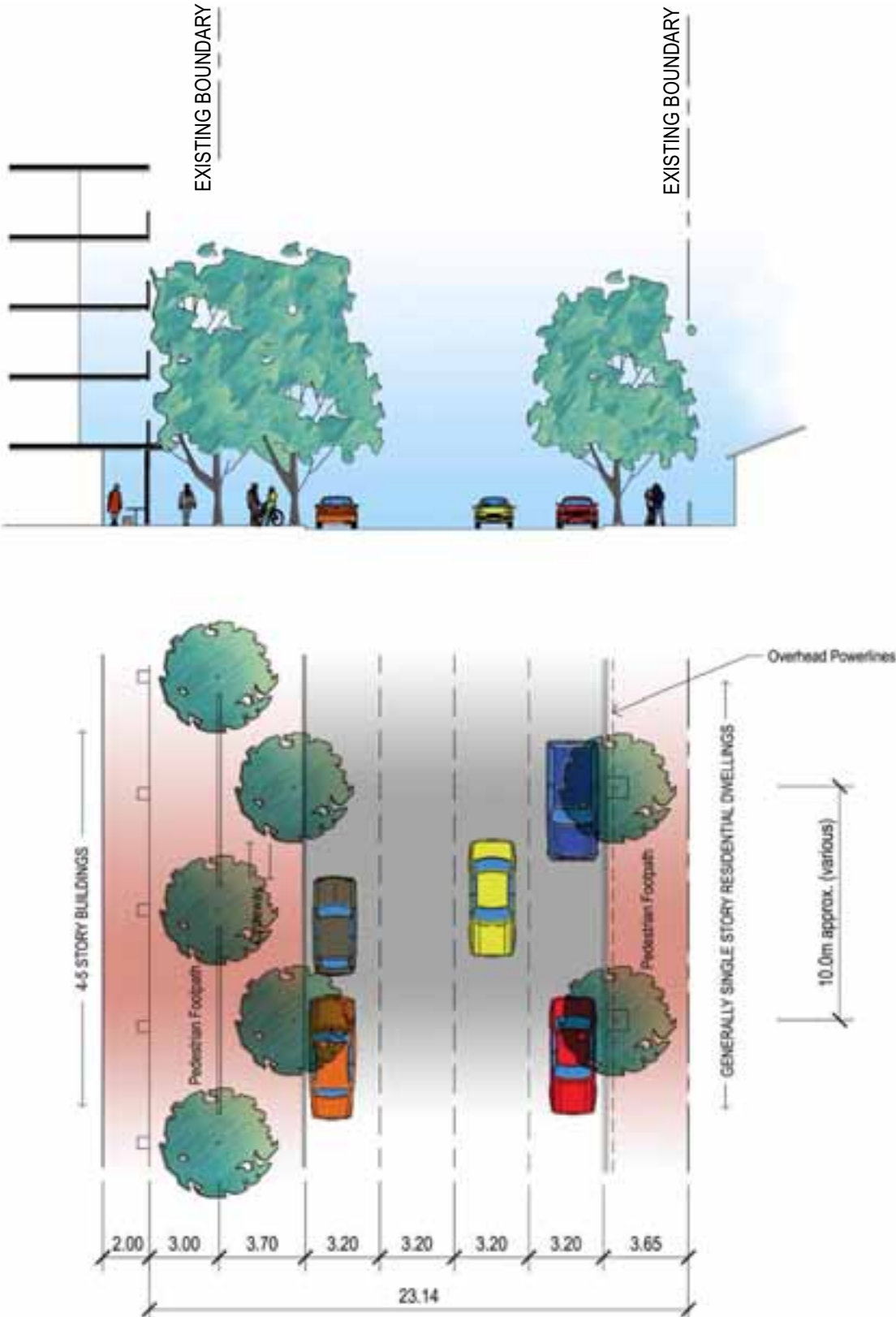


Diagram of existing road configuration between Coulson Street and Sydney Road.

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OPTION 1



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PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES - MITCHELL ROAD

The following pages illustrate three potential concept options for new configurations to achieve a separate cycle way and footpath adjacent to Mitchell Road.

OPTION 1

Option 1 requires the facade of any proposed new buildings to be set back from the current boundary line by 3m. The ground floor building line is set back a further 2m creating a covered walkway. New street trees are planted in two staggered rows demarcating the separation between the cycle way and footpath thus creating a boulevard effect.

Buildings should be as light as possible with simple post and beam canopy structures to maintain visual connection with the street. Being on the western side of the street, the built form and trees will provide shade and respite from the hot sunny days.

The option maintains the road infrastructure and takes advantage of additional space achieved by these set backs.

Relocation of trees / kerb / services at the southern end is required along with a new crossing at Sydney Road and a new entrance into Sydney Park to ensure the success of a continuous linkage.

The use of paving materials to demarcate separation of pedestrian and cycle ways is important to indicate a warning to people using this space, especially those parking at the kerb and crossing the cycle path.

Consideration is required in the detailed design, to the location of bus stops and shelters to minimise any conflict. This might be a node extending into the parking bay where the bus pulls up.

Bollards could be used at key pedestrian crossing locations to signal to cyclists that they are entering into a special zone.



Example of a positive relationship between trams, cycleway & pedestrian area.



Example of existing configuration.



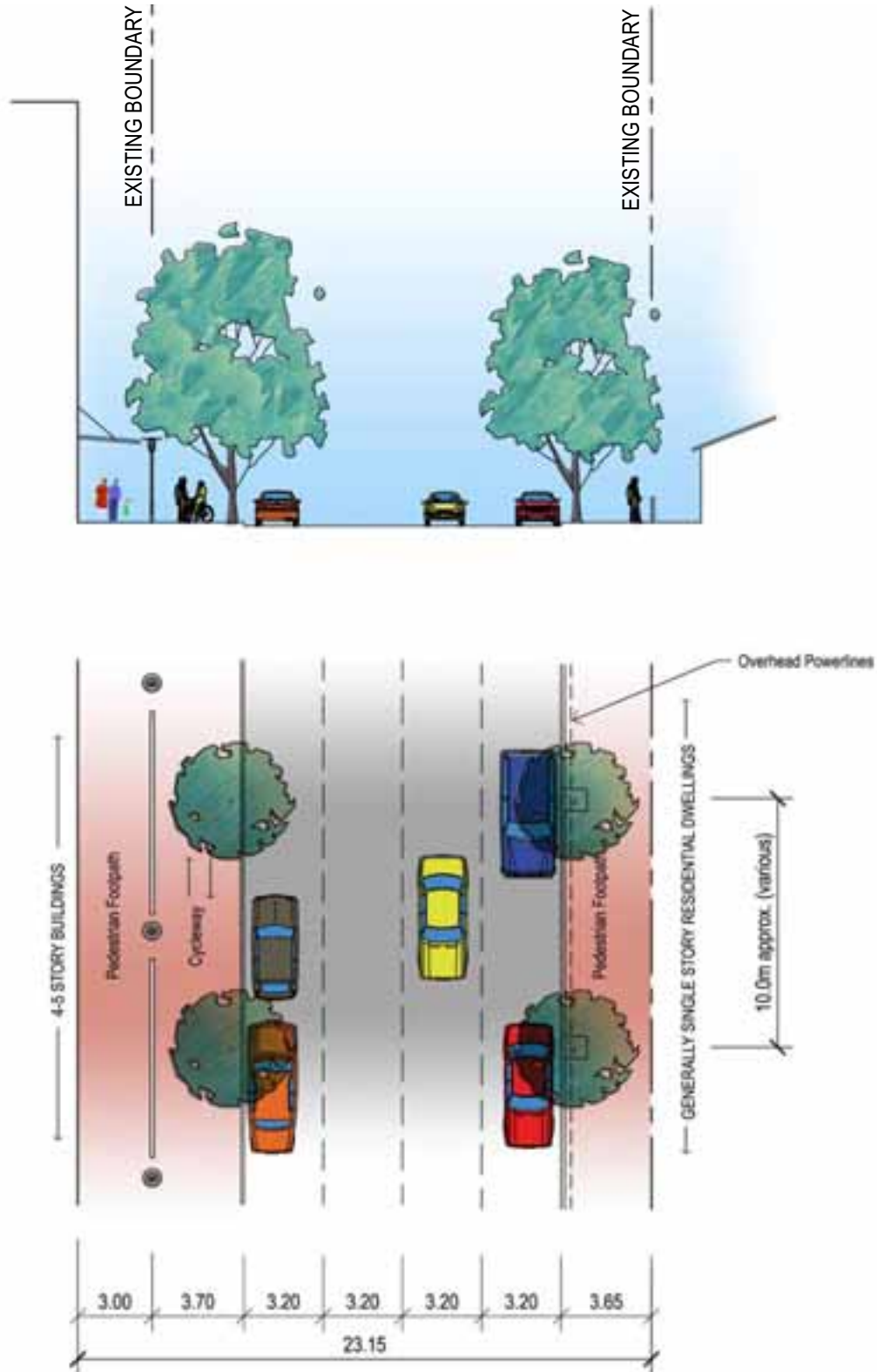
Example of the potential space



Artists impression - Option 1 - looking north.

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OPTION 2



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PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES - MITCHELL ROAD

OPTION 2

Option 2 provides a separate cycle way and footpath but with only one line of street trees (existing or new) the building line is set back 3m from the existing boundary achieving a closer relationship with the road and passing traffic.

Light weight glass canopies would extend to cover the footpath that allows more light into the space and provides protection from rain. Under awning lighting would encourage walking at night and the cycle way separated with pavement variations.

An option that creates space dominated by the built form, however as commercial activities are unlikely to extend the full length of Mitchell Road, there is the potential to replace the canopy with the second row of trees where the use is other than commercial and the buildings are setback further. This would further enhance the visibility of the commercial activities.

The option maintains the road infrastructure and takes advantage of additional space achieved by the setbacks. Relocation of trees / kerb / services at the southern end is required along with a new crossing over Sydney Road and new entrance into Sydney Park to ensure success.

A light weight post and beam verandah could be an option to further separate the cyclists from the pedestrians.



Example of existing configuration.

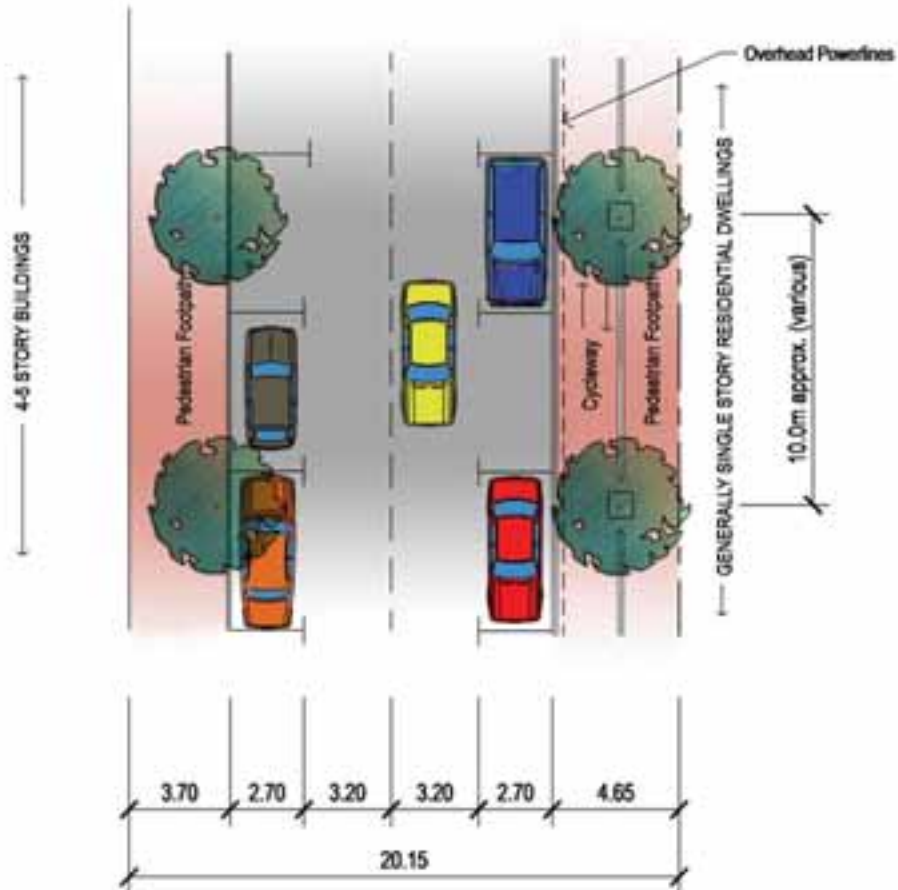
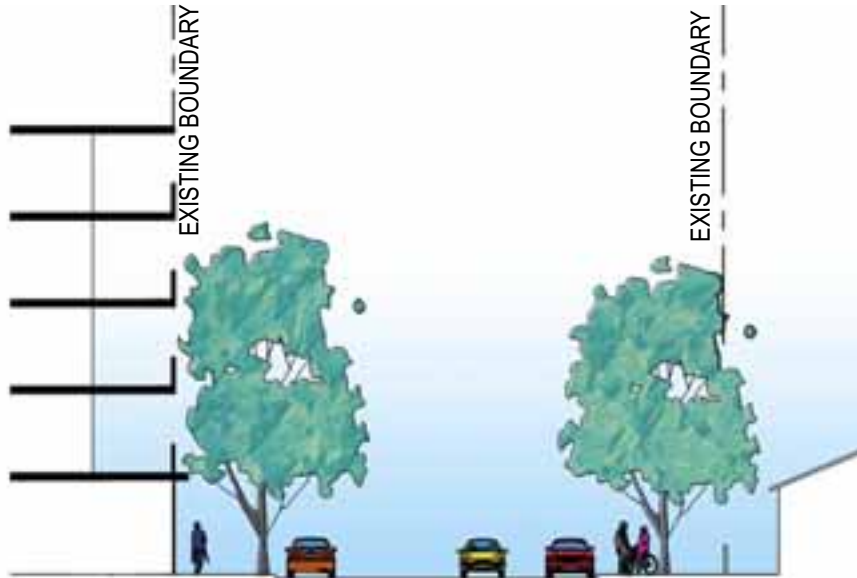


Example where residential fronts the street.



Artists impression - Option 2 - Looking north

OPTION 3



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PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES - MITCHELL ROAD

OPTION 3

Option 3 illustrates the potential to develop the cycle way footpath on the eastern side of Mitchell Road.

New development could exist on the current boundary on the western side of the road (set back as required) with the best relationship with the road for retail uses. Width is gained on the east by reducing the two parking lanes from 3.2m to 2.7m maintaining the western kerb line. New street trees separate the cycle way and footpath and potentially the existing over head services could be put under ground.

This option would link better with the existing crossing at Sydney Road and provide better amenity to the street by reducing its appearance as a wide fast road (carriage way the same width).

Issues that need to be considered include the feasibility and cost of moving the kerb and associated storm water infrastructure and any realignment of the road surface levels.

This option would provide a link through the precinct but would not necessarily assist with activation of the western edge, nor would it provide the best access (both physical and visual) to Sydney Park.

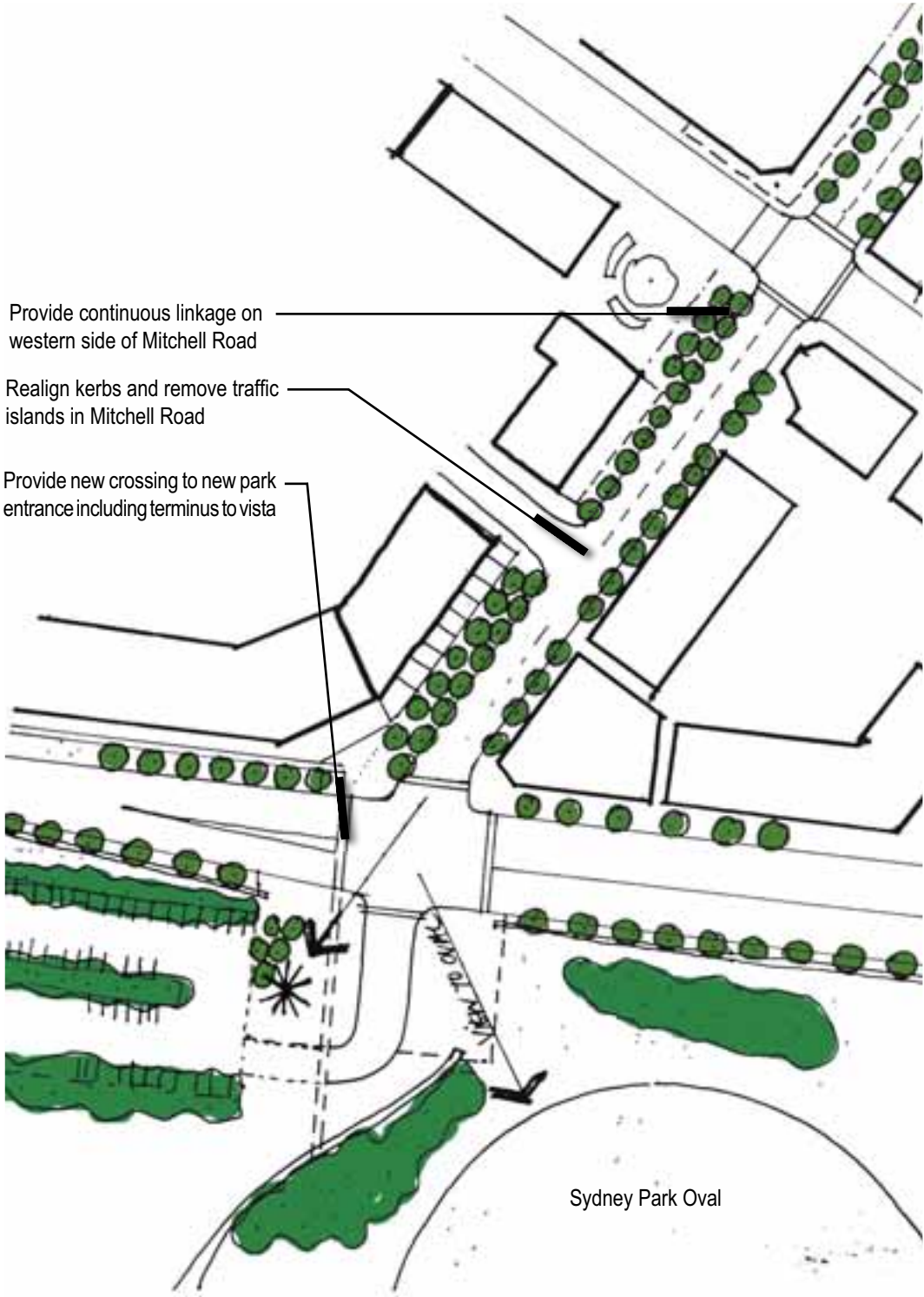


Existing situation



Artists impression - Option 3 - Sydney Road / Mitchell Road intersection looking north.

MITCHELL AND SYDNEY ROADS - REQUIRED CHANGES



PART 1 - ERSKINEVILLE - SYDNEY PARK LINKAGES CONT.

CLARIFICATION

These options are shown as spatial arrangements only and do not take into account the resultant effects of flood waters.

In part 2 of this report it explains the resultant built form requirements at the corner of Mitchell Road and Coulson Street. But basically if the requirement for floor levels is to be at 1.5m above pavement levels the built form will need to be set back to allow steps and ramps for access and would not be feasible to set this back further to include Option 1 or 2.

RECOMMENDATION

Our preferred option would be Option 1 with new street trees suitable for providing a roosting canopy and food source for native birds and bats creating a strong boulevard and enhanced character of the street. At the intersection and where commercial uses exist, the trees could be replaced with a canopy as in Option 2. The further set back of the residential proponent will increase the space available for the growth of these trees.

This will only be achieved if the peak maximum flood level (PMF) and 1 in 100 year flood levels are reduced at Mitchell Road and Coulson Street to require floor levels to be at 500mm above pavement.

The boulevard should continue along side Erskineville Oval with upgraded connections to the oval.

A terminus to the boulevard at Sydney Park is required along with the change in kerbs and street levels as shown in the sketch opposite.

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PART 2 - PROPOSED RETAIL PRECINCT - DRAFT DCP

The Draft Structure Plan nominates ground floor commercial development be located at the Mitchell Road / Coulson Street intersection with the desire of entertaining a 3,500m² - 4,000m² supermarket sleeved with other retail / commercial uses to activate the street frontages.

There are a number of factors that affect the feasibility of this site and intended use.

1. CATCHMENT, ACCESS AND CIRCULATION

- As most of the catchment within walking distance is north of the site the suggested commercial centre is not centrally located.
- An effective bus network operates along Mitchell Road in and out of the city with good patronage but could be enhanced. Bus stops exist (and should exist) at regular intervals along the length of the site allowing good access into the site at Ashmore Street, Maddox Street and Coulson Street. By locating the commercial precinct centrally there are more opportunities for residents north of Coulson Street to make use of facilities on their way home from work, as they are en route and does not require a special visit. The diagram opposite illustrates potential patterns generated from bus stops in these locations.
- Queuing along Mitchell Road currently occurs at peak times and an increase in vehicle movements to this intersection is not desirable as this will cause more congestion reducing the effective north south connection on Mitchell Road.

2. FLOODING

The report prepared by Cardno Lawson Treloar Pty Ltd states that with this structure plan the ground floor level of the proposed premises at the Coulson / Mitchell intersection will need to be 1.5m above existing pavement levels to be free from flood inundation.

- This massive change in level reduces the viability of commercial uses as it is difficult to get to (long ramps and stairs required) and the floor level is roughly at an average persons eye level reducing visual connection and interaction of passers-by or opportunity for window shopping.
- The flood level also provides problems with basement car parking which can be overcome through self raising mechanical dams at doors etc., but there is the cost consideration of these. Kiaora Place development in Double Bay became financially infeasible in this current market (2005/06) due to issues of cost with basement parking and flooding.

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SOURCE: Draft South Sydney Development Control Plan Amendment: Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct

PART 2 - PROPOSED RETAIL PRECINCT - DRAFT DCP CONT.

There are a number of strengths and weaknesses of the proposed DCP that should be pointed out as follows.

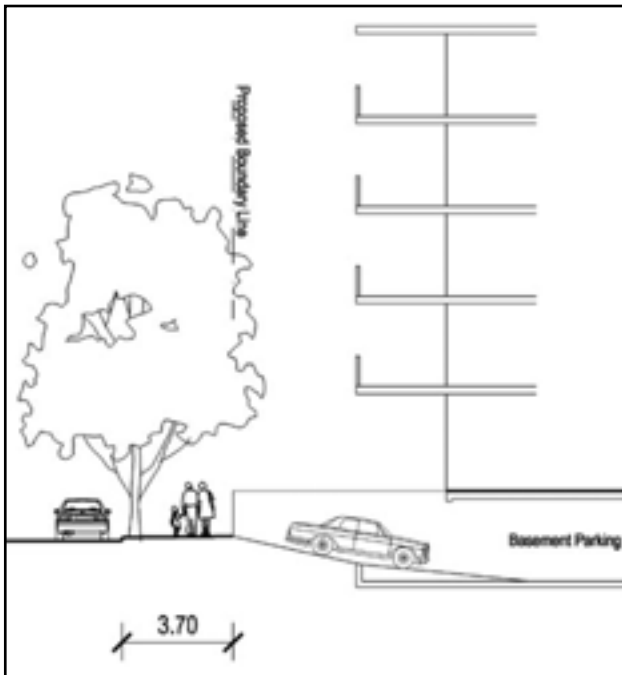
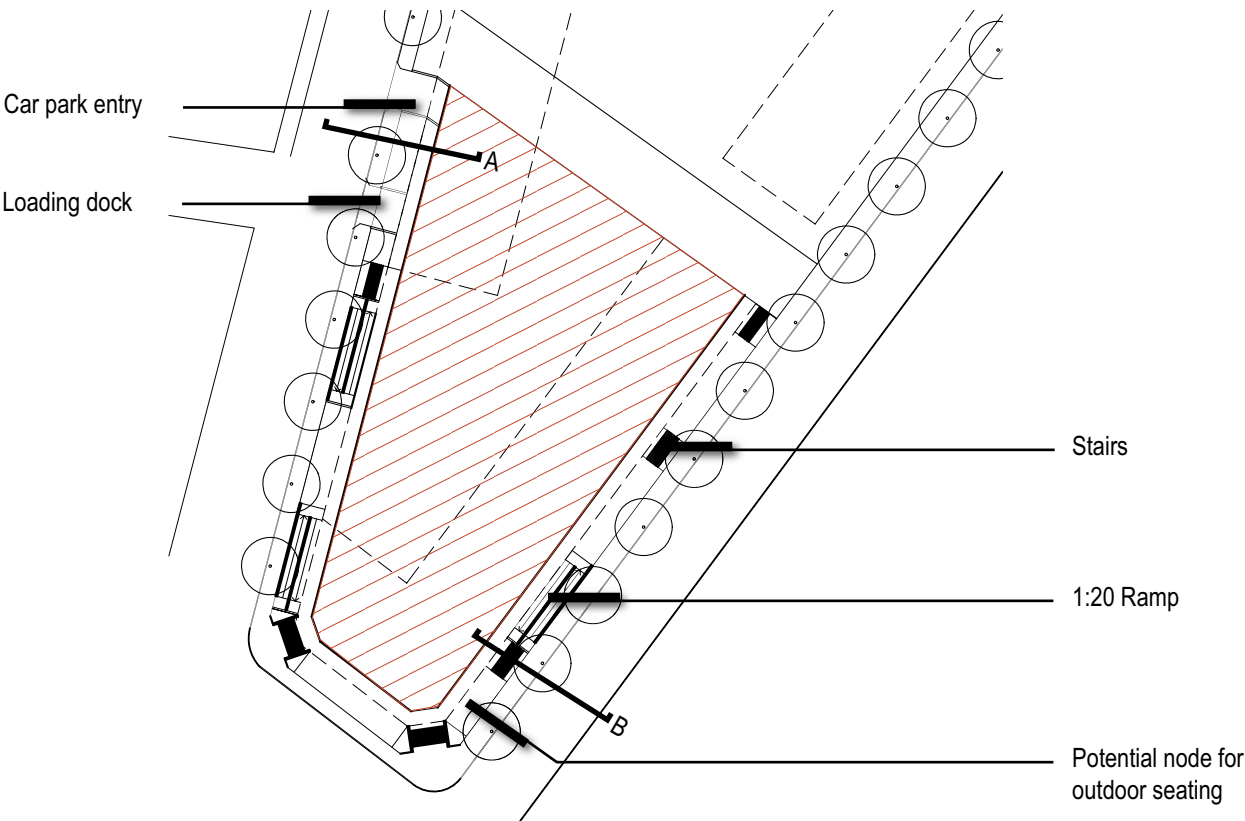
Strengths

- Supports and enhances the intersection of Mitchell Road and Coulson Street as a commercial node, to compliment the existing in Sydney Park Village.
- Capitalises on valuable land with high exposure to passing traffic assists with the viability of new commercial uses.
- Could enhance the urban structure of both Mitchell Road and Coulson Street by providing a balance to the recent development on opposite sites in terms of height and bulk.
- Strengthen the structure of the intersection with a positive corner development activating both streets.

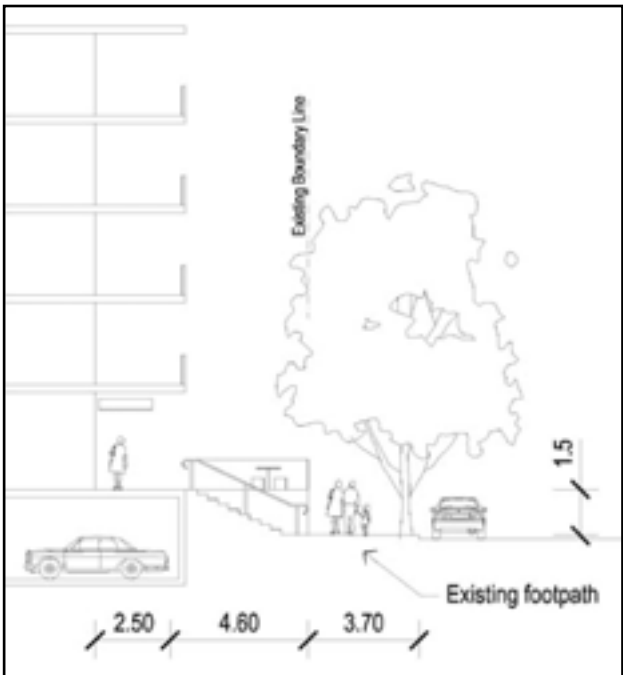
Weaknesses

- Set in flood prone land with the requirement of the floor levels to be approximately 1.5m above existing pavement levels. This provides poor access, both visually and physically, from the street and would reduce the viability of the land for commercial uses. Long ramps would be needed to provide access up to 30m in length plus landings and if located along the boundary of the site then direct access would be greatly limited from street level.
- Such elements would restrict the potential to build on the historic fine grain rhythm of the built form of this area, typically narrow and vertical, as one of the objectives in the draft DCP. This would have a negative relationship with the properties adjacent.
- Limited parking provisions in adjacent streets.
- Issues for basement use, costly, infrastructure below.

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Section A - New North / South Street



Section B - Mitchell Road Section

PART 2 - PROPOSED RETAIL PRECINCT - DRAFT DCP CONT.

HOW COULD THIS SITE BE DEVELOPED WITH THESE CONSTRAINTS?

The concept plan on the facing page is a suggestion for how the proposed structure plan could be achieved in a practical physical sense. 9 steps are required at the worst point to elevate you to above the flood plane. This requires a setback of 4.6m from the existing boundary for access stairs and ramps to provide the best access from the street to an upper level walkway and potential nodes for outdoor seating. This results in a gross floor area of the ground floor of 4,200m². This form would not allow for widening of the western side of Mitchell Street reducing the ability to achieve the north south link.



Example of raised entry off street.

Opportunities

- Vehicle access and parking would only be possible from the new north south road north of Coulson Street. There are inherent problems with underground parking in this location due to the flooding issue, which will require either the access drive threshold to be between 1.2- 1.5m above existing pavement level or a mechanical flood water dam device installed which rises automatically with rising flood waters to prevent discharge into the basement. This is expensive and could fail posing risk to the basement. The solution shown opposite assumes a rising dam device is used.
- A loading dock could also be provided off the north / south street opposite the extended lane to assist manoeuvring but not ideal as a visual terminus to that lane. With both the loading dock and vehicle entrance in these positions, a long length of wall of the development would not contribute positively to the street.
- An access lane through the block could provide an alternative access for parking and service areas allowing the street frontages to be fully active. This lane could also provide vehicle access to residential developments there by limiting the potential conflict zones at footpath locations.
- It would appear that council should be looking slightly wider than the site when looking at resolving PMF levels. Cardno Lawson Treloar have suggested a number of alternatives one being to install a new storm water culvert from the intersection of Coulson Street and Mitchell Road up to Sydney Road then discharge to Alexandria canal. This would reduce the risk that currently exists to existing properties around this intersection and allowing development of the site in question in a way that contributes positively to the urban form and the local community. It is estimated that the required building floor level could be reduced from 1.5m to 0.5m above the existing paving level.



Example of physical connections required with 10 steps.

By achieving a lower PMF level to around 0.5m it is feasible to achieve both at grade connections with the ground floor with a small ramp inside the building entrances and setbacks to achieve the connection along the western side of Mitchell Road. A much improved outcome that will enable development to sit more appropriately within the context.



Example of residential with raised floor levels and negative relationships with the street.

However, with this scenario the gross ground floor area is 5,090m² would still not be sufficient to establish both a supermarket and sleeved shops unless it was underground, but this loses potential parking. It would however support a number of small to medium size retail / commercial / community facilities but not ideal

This scenario does not cater for Option 1 or 2 as in Part 1 of this report.

ATTACHMENT E

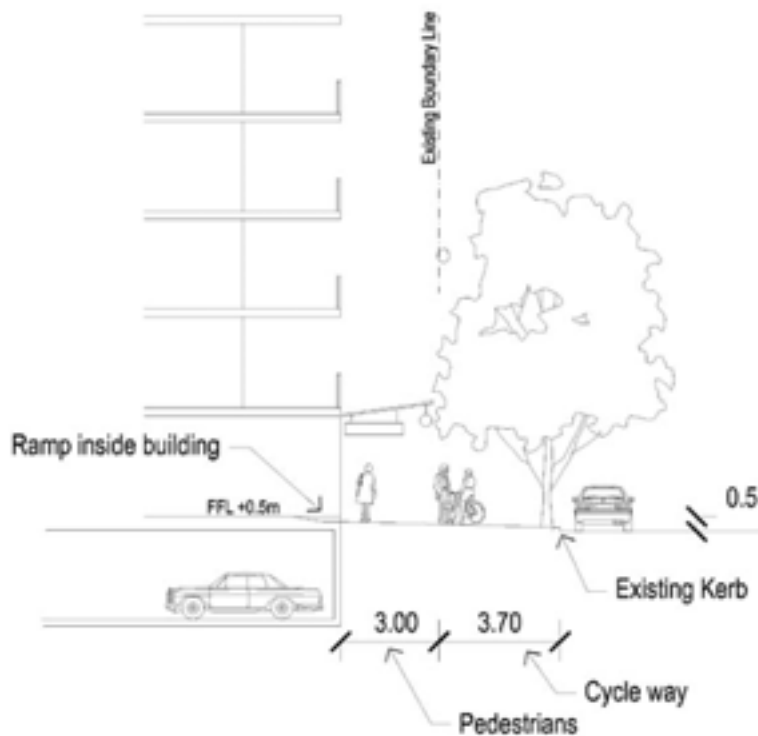


Artist's impression of Mitchell Road looking north with required steps / ramps to access the floor level 1.5m above existing pavements.

PART 2 - PROPOSED RETAIL PRECINCT - DRAFT DCP CONT.

REDUCED FLOOD PMF LEVELS

This example illustrates the spatial configuration for the proposed commercial precinct if the PMF levels are reduced to 0.5m above pavement levels.



Section illustrating outcome of lower PMF levels and including the Option 2, Erskineville / Sydney Park linkage scenario. Mitchell Road indicative section looking north.

ATTACHMENT E



SOURCE: Draft South Sydney Development Control Plan Amendment: Urban Design 1997 - Part G Special Precinct No.7 - Ashmore Precinct

PART 2 - PROPOSED PUBLIC PARK - DRAFT DCP

The proposed public park north of the extended MacDonald Street provides an opportunity for active and passive recreation with the precinct and doubles as a detention basin to attenuate flood events entering the site from the north to help alleviate PMF levels at Coulson Street.

The flooding study by Cardno Lawson Treloar Pty Ltd has assumed a storage capacity of 8,600m³ achieved by an excavated basin up to 1.2m deep with 1:4 batters sloping up to the footpath level or terraced.

Strengths

- Intercepts the storm water overland flow from north of the site early which reduces flooding to the south of the side.
- Allows development to exist on the wedge shape piece of land south of Mc Donald Street with good street frontages to all streets.
- Is centrally located as a community park with good access for new residents and provides a focus to the community.
- Must be a focus to the community with retail / commercial uses surrounding it as an integrated centre supported by frequency of use and public surveillance.

Weaknesses

- Draft DCP indicates residential around all four sides of the park which limits the use of the park. Mixed use development including community facilities would be better on at least two sides that may contain cafes or restaurants with outdoor seating and public outdoor seating to allow surveillance of the park during the day and evening, and to allow the opportunity for users to buy a sandwich for lunch and sit in the park.
- Finished ground level will be below the surrounding streets which reduces access to the park. Requirement of ramps and steps required.
- High water table may cause the park to be permanently damp and may release contaminants into the park (based on Douglas and Partners investigation of 165 Mitchell Road with the water table being 1.5m below ground level).
Excavation into potentially contaminated land may pose risk to the community.

One possible alternative is to use a tanking system below the park allowing the park to be at foot path levels with good drainage whilst performing its detention role. This tank could feed irrigation tanks for the public domain.



Photo example of a detention basin Carrisbrook Estate, Punchbowl.



Suggested terrace option for detention basin.



*Example of detention tank system
Source: Atlantis products.*

ATTACHMENT E



Alternative structure plan
SOURCE: Turner and Associates



Alternative concept plan
SOURCE: Turner and Associates

PART 2 - ALTERNATIVE CONCEPT PLAN - MACQUARIE GOODMAN

An alternative structure plan has been developed by Turner and Associates on behalf of the proponent of the site. When comparing this against the Draft DCP there are a number of similarities but two fundamental differences, the location of the park and community centre. The following comments are from an urban design perspective.

Strengths

- Inclusion of two more local streets east west provides greater permeability through the site.
- Centrally located commercial / retail / community centre with good access to the wider neighbourhood.
- Sympathetic mixed use and built form along Mitchell Road relates well to existing on eastern side.

Weaknesses

- Location of park does not have active uses adjacent and is not the focus to the community.
- Busy Mitchell Road is a hazard for young children and reduces amenity of the park.
- Boulevard and landscape along Mitchell Road is too soft and unlikely to be used. This reduces the form of the street and reduces potential activity. The soft landscape will become a maintenance issue for council.
- Land adjacent has a potential high value due to the high passing traffic and requires close visual and physical connection with the road users.
- No open space associated with commercial centre.
- Linear park through the site is not wide enough for active recreation and would be in shade for a good part of the day, maybe better as front gardens to residential.
- The north / south road does not connect with Ashmore directly reducing access and safety to the wedge park at the north.



Example of soft landscape strip associated with new development on Euston Road which is a poor urban outcome.

ATTACHMENT E

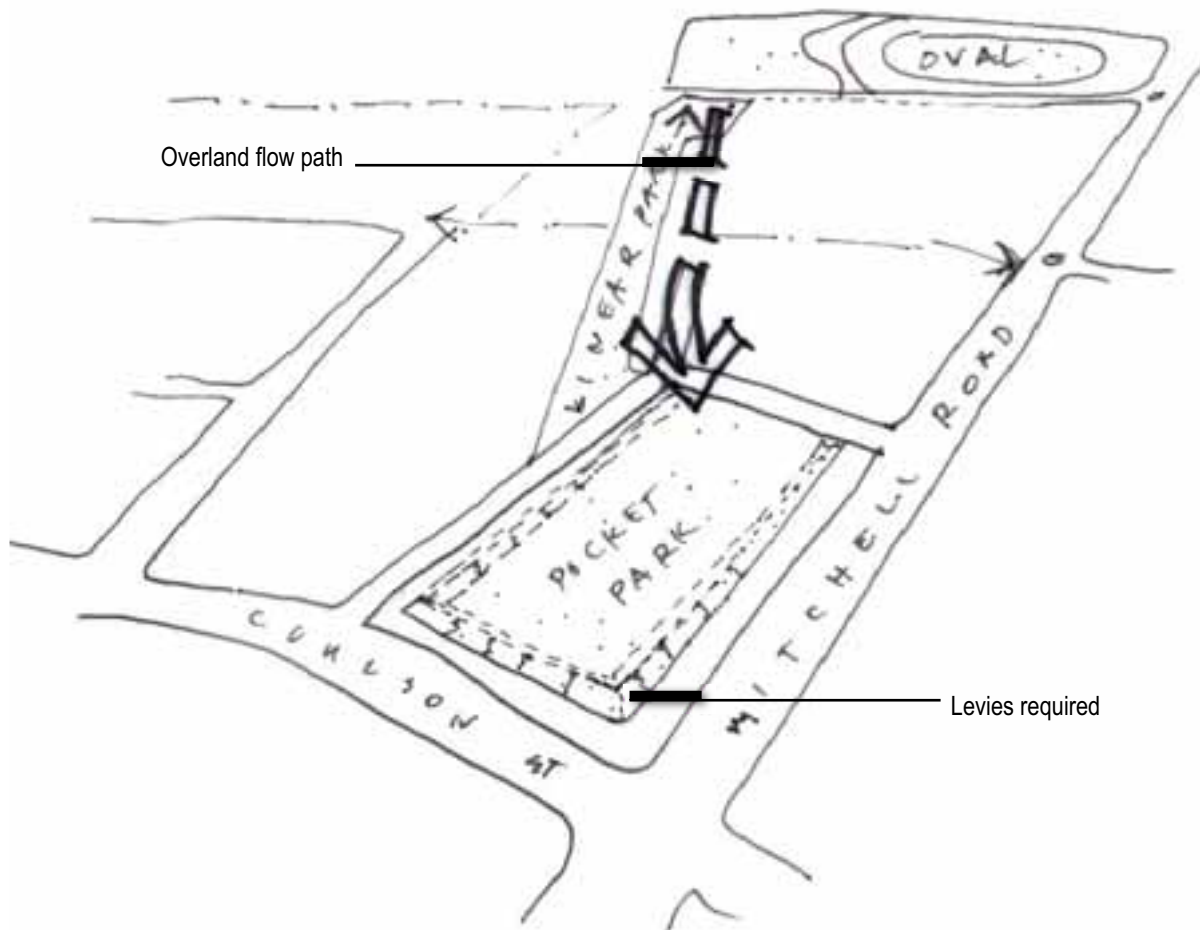


Diagram based on drawing provided by Turner + Associates.

PART 2 - ALTERNATIVE CONCEPT PLAN - MACQUARIE GOODMAN

The following discusses the strengths and weaknesses of the proposed park location as shown on the facing page.

Strengths

- Could be well connected with a potential new cycle way / pedestrian connection between Erskineville Oval and Sydney Park on Mitchell Road.
- An underground detention tank could be used under the park (depending on the invert levels of the storm water pipe directly down stream) allowing the surface of the park to be at foot path level. This would be of benefit to the community as access would be achievable from all angles and has better visual connection with the local neighbourhood providing better security.

Weaknesses

- If the park is recessed 1.2m from footpath level with 1:4 batters to the sides as a detention basin, it will not assist with the reduction of flood waters at this intersection.
- To be of benefit, levies around the edges would need to be constructed to intercept overland flows and hold them until the flood waters in the intersection recede. This would provide physical and visual barriers from the adjacent streets and would be of limited benefit to the community.
- This position does not allow the new community to focus on this park as a central and integral part of their community.
- The strong built form of Mitchell Road would be reduced thereby reducing the experiential quality of the street.
- High water table may cause the park to be permanently damp and may release contaminants into the park (based on Douglas and Partners investigations of 165 Mitchell Street with the water table being 1.5m below ground level).
- Excavation into potentially contaminated land may pose risk to the community.



PART 2 - ALTERNATIVE CONCEPT PLAN - CLOUSTON ASSOCIATES

SUGGESTED ALTERNATIVE CONCEPT

CLOUSTON Associates have prepared an alternative concept plan (as illustrated on the facing page), based on the structure set out in the Draft DCP to illustrate an alternative that draws upon ideas from both previous schemes. FSR, overshadowing and height relationships etc., need to be tested but the following lists the key considerations of the scheme.

- Provides positive relationships between the park and the commercial / community centre with active uses on the southern and eastern side of the park essential for safety and visibility.
- Maintains a detention basin to catch the overland flows from the north of the site, but would need to be deeper to achieve wedge form.
- Good activation of Mitchell Road with commercial nodes at intersections and key nodes to draw attention of passing traffic to community centre.
- Provides for a linkage along the western side of Mitchell street as per Option 1.
- Provides for a small supermarket with sleeved with mixed use development and residential above. Includes underground parking.
- Assumes new storm water culvert is installed at Mitchell Road / Coulson Street intersection to reduce flood levels.
- Access from all underground car parking should deliver people to public spaces before entering buildings.

ATTACHMENT E

PART 2 - RECOMMENDATIONS

Changes to the draft DCP are required as suggested in the first section of this report and suggestions illustrated in Part 1 and 2 be considered for the final DCP.

- The community park and commercial centre to be located centrally on MacDonald Street.
- Cycle way / footpath be provided on the western side of Mitchell Road in line with Part 1 Option 1 and at some locations adjacent to commercial uses, Option 2 to exist.
- New culvert be installed at Mitchell Road / Coulson Street intersection discharging into the Alexandria Canal.
- Reconfiguration of Mitchell Road (south end) to provide cycle way / pedestrian linkage.
- Provide crossing and entry to Sydney Park.
- Provide a terminus to Mitchell Road at Sydney Road.
- Test FSR for proposed DCP with considerations on population.
- Test overshadowing.