

Beauchamp Park, Chatswood ISSUES REPORT

for Willoughby City Council



BioDesign & Associates Pty Ltd
August, 2007

BEAUCHAMP PARK ISSUES REPORT

This report was commissioned by Willoughby City Council (WCC) because it is 10 years since the last Plan of Management for Beauchamp Park was completed (WCC 1997). BioDesign & Associates Pty Ltd (BioDesign) was commissioned to prepare an Issues Report based on a site analysis of the park that identifies the current and future management issues for the park.

The report is in three parts:

Part 1 – Executive Summary

Part 2 – Detailed Study and Site Analysis

Part 3 – Tree Issues Report

Part 1 contains a summary of the findings of the information review, site analysis and tree assessment, and consultation with community and stakeholders. It identifies the issues which arise from the findings and the opportunities the site presents and makes recommendations that address the issues and take advantage of opportunities.

Part 2 provides the detailed findings of the information review, site analysis and consultation with community and stakeholders, presented in text, graphics and tables and supported by appendices. It enables an understanding of how the issues were identified and the basis of the recommendations.

Part 3 contains the findings of the tree assessments and details of the specific tree management issues in the park. It includes recommendations and maps summarising the data.

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Beauchamp Park, Chatswood ISSUES REPORT

PART 1: EXECUTIVE SUMMARY

for Willoughby City Council



BioDesign & Associates Pty Ltd
August, 2007

PART 1 – EXECUTIVE SUMMARY

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1.1 Site Analysis Findings

1.1.1 Ecology

The upper part of Beauchamp Park is open and sunny and it is hotter and less comfortable in the summer months than the rest of the park. The lower section of the park is shady and cooler, moister and more sheltered than the upper section.

The park drains to the corner of Nicholson and Darling Streets into a stormwater system that empties into Middle Harbour. No rainwater or stormwater associated with the site is currently harvested. Localised flooding occurs in the lower section of park.

No groundwater bores are present in the park. Irrigation is from mains water and subject to current water restrictions. In the absence of restrictions, the oval would be watered three times per week in spring and summer with a weekly usage of 300,000 litres; current weekly usage is 100,000 litres.

The natural soils of the site are relatively fertile clay. Cutting and filling in the upper part of the site to form the oval altered the landform and created steep embankments. It is likely that the cut area now contains very shallow soils and the fill will have deep soil with a mixed profile. The lower part of the park appears not to have been changed much and the soils are probably deep and moist.

It is unlikely that the site contains contamination but no contamination tests appear to have been conducted to confirm this at any stage.

Minor erosion occurs in some places.

The lower portion of the site contains a significant number of large old remnant trees from the original Blue Gum High Forest vegetation. This vegetation is listed as an endangered ecological community but the remnant in the park is not mapped as significant and it is relatively isolated from other remnant vegetation in Willoughby. The remnant trees are ecologically important to the park, linking it to its natural heritage, providing habitat for indigenous fauna. They enable users and local residents to enjoy contact with nature and are much loved.

The garden beds in the lower section are planted mainly with exotic species which require regular watering and recent water restrictions have contributed to a drop in vigour and health of the plants.

Tree plantings are a mixture of remnant and planted indigenous, native and exotic species. The lower section contains predominantly remnant, indigenous and native specimens and the upper section contains predominantly exotic plantings. Understorey plantings are exotic throughout.

The large majority of the trees are mature or semi-mature but some over-mature trees are reaching the end of their useful life. Only a few juvenile trees now exist to replace the older trees.

A relatively large number of the park's trees are in poor to moderate condition. In particular, remnant trees that are underplanted with garden beds have developed problems requiring their removal and this is on-going. Many of the conifers and the understorey shrubs are not thriving. Although bracket fungi were noted in quite a few old trees, the larger remnant and planted indigenous and native trees are generally in moderate to good condition which means that the structural plantings in the park are sound. However, many of the recent plantings of *Eucalyptus saligna* are not thriving.

Although quite a few trees have structural problems requiring attention, very few present a serious risk because they are located in areas unused or infrequently used by people and away from structures. A few dead trees are present. The plantings around the playground are generally in a safe and good condition but a few specimens require monitoring.

There is a lack of consistency in the plantings in the park in terms of species and lay-out. This results in horticultural management conflicts and in a lack of integrated character for the whole park. Some of the plantings need to be upgraded or replaced and the streetscape plantings should

be reviewed with a view to developing a holistic approach to their long-term role in the heritage conservation area and in Beauchamp Park itself.

Weed problems are generally minor in the park but there are a few plantings of species that are listed as undesirable in Willoughby.

A variety of species of indigenous fauna, in particular birds, use Beauchamp Park.

1.1.2 Community

The park does not contain any registered aboriginal sites of significance.

There are no heritage items of state, regional or local significance listed for Beauchamp Park. The Willoughby DCP 2006 states that “decorative sculpted metal exhaust vents are attractive remnants of original ‘street furniture’” and two such vents are located in the park.

Development of the site has occurred during the last 150 years. It was heavily wooded when clearing first began in 1864. Early uses were for farming and a slaughteryard before it was purchased by the government and proclaimed a public park in 1899. Further clearing occurred, together with ornamental plantings of native and exotic trees and shrubs over the years but the drainage works, levelling, and construction of the oval, pavilion and other facilities didn't occur until the late 1920s. The pavilion was expanded and the International Grove was constructed in 1965. A temporary skateboard from 1976 to 1979 was well used. In 1982 the National Trust of Australia (NSW) classified the Urban Conservation Area of North Chatswood describing Beauchamp Park as the “square” which is the focus of the townscape. In 1995 Council proposed that conifers that had been planted 20 years previously be removed from the western border of the park. The new playground equipment was officially opened in 1999 and nest boxes were installed in the trees in 2003. New toilets were recently built on the pavilion.

The park is located relatively close to the business centre of Chatswood and is easily accessible by public and private transport as well as by foot. It is bounded by secondary roads so traffic noise and road safety are not a significant issue.

Although there are no marked crossings, easy and safe pedestrian access is possible from the three sides of the park which adjoin relatively quiet public roads. The paths through and along the park provide good pedestrian circulation except in the area adjacent to Beauchamp Avenue. The shared bicycle/pedestrian path is part of an existing bicycle route and proposed routes.

Disabled access is possible in most but not all areas of the park. Some alterations and improvements are needed.

The park is easily accessible by car and parking needs of users are generally well-served. There are problems with street parking being occupied during the day by non-park-users. It may be possible to exclude cars from within the park by closing its existing carpark and accommodating all parking along Nicholson Street.

The park is extremely well-used for sport and informal recreation, including dog walking, jogging, ball games, exercise, picnics, play, kite flying, reading and relaxing. The oval and the pavilion are well-used by sporting groups and local schools. The oval is also accessed all year round for dog walking, jogging, informal ball games and kite flying by informal users. On the whole, sharing the oval between sporting groups and dog walkers works surprisingly well. The oval is well maintained but problems relating to its condition, facilities and shared uses do exist. All the current user groups plan to use the facilities at the current level into the future, except for the rugby club which is expanding.

The basketball court is well-used for informal sport and exercise. The pavilion is regularly used but will need to be renovated and expanded to accommodate increased usage. Spectator seating

needs to be replaced and shade provided. No regular festivals or community celebrations are held in the park.

The new toilets in the upper section of the park are well-sited, well-used and in good condition. There are no toilets in the lower section of the park.

In general, the furniture is run-down and needs replacing or repair.

The existing playground mainly services the 0-5 year olds. Some repairs to equipment are needed but it is mostly in good condition. The most common complaint about the park was that the playground did not cater for older children.

The remains of the "International Grove" are overgrown and its use is poorly defined.

Existing signage is adequate but one more entry sign is needed on the corner of Nicholson and Darling streets.

The main issues of anti-social behaviour in the park relate to some adolescents using the pavilion, basketball court and playground at night for drinking. They leave litter and evidence of drug and alcohol use behind. Graffiti and vandalism of buildings and furniture and fittings is a problem.

The level of lighting to the streets around the park and within the park is quite low and lights are not working in some places. This makes the path feel unsafe at night.

1.1.3 Delight

Beauchamp Park provides a welcome oasis in Chatswood and a strong visual focus for the heritage conservation area which surrounds it. The park offers a wide range of spatial experiences which are highly valued by the community. Traffic noise is not a problem and the sounds of birds and the breeze blowing through the trees can be heard within the park, giving it a strong feeling of space and freedom.

Because of its location on the side of a hill, the park is not readily visible from the surrounding built up areas. Looking into the park is very inviting from most sides, particularly into the lower part of the park. The view into the basketball court is restricted by the conifers which limits surveillance of the court from outside. Views out of the park are only possible from the upper levels of the park. Within the park there is a good view over the oval and a potentially good view into the lower section is available from the oval.

However, because of its lay-out, topography, pattern of development and landscaping, Beauchamp Park reads as two separate halves, the upper open oval area and the lower closed area and it has a disjointed character as a result.

The lower part generally has a 'natural' character and is very inviting because of its topography, different plantings and an abundance of birdlife. It is pleasantly cool, shady and moist and there is enough sunlight to prevent it from being gloomy. The remains of the "International Grove" fountain provide an enclosed, rather mysterious play space. The colours and textures of the trunks of the large trees, the soft grass, the shadows and the smell of vegetation all add to the appeal of this area.

The upper oval area has a 'utilitarian' character and lacks a real 'sense of place'. It is open and sunny but too bright and hot for comfort during summer. Although it contains many different plant species and the rose garden provides a colourful focus, it lacks shade, shelter or visual complexity and the plantings fail to bring the area together or to link it to the lower part of the park.

1.2 Issues

TABLE 1.1: ISSUES SUMMARY FOR BEAUCHAMP PARK		
A. COMMUNITY CONSULTATION		
ISSUE	PROBLEMS RAISED	RAISED BY
Shared use of oval	1. Conflict between people/sports groups and dogs/dog owners	Gordon Cricket Rugby Juniors Public Meeting 4 submissions
	2. Dog poo on oval/dog poo collection not policed	Gordon Cricket Rugby Juniors Public meeting 3 submissions
	3. Limited access for rugby on Sundays	Rugby Juniors
	4. Encroachment on cricket season by rugby club	Gordon Cricket
	5. Conflict with social groups who use pavilion	Gordon Cricket
	6. Conflict with corporations at lunchtime	St. Pius
	7. Conflict in sharing change room toilets between sporting groups and community groups	Performing Arts Unit
Oval maintenance	8. Oval boggy on western side around cricket pitch	Rugby Seniors Rugby Juniors
	9. Wear and tear of oval surface	Gordon Cricket Rugby Seniors
	10. Closure of oval after slight rain & slowness to reopen	Rugby Juniors
Oval size	11. Hardness of grounds due to drought	Rugby Juniors
	12. Oval undersized and only a single playing area; need room to expand	Rugby Seniors Rugby Juniors
Pavilion	13. Grandstand doesn't provide enough protection	St Pius
	14. Disabled access to pavilion is poor	Performing Arts Unit
	15. Lack of separate change rooms	Gordon Cricket
	16. No permanent scoreboard	Gordon Cricket
	17. No lockable space in kitchen	Gordon Cricket
	18. Need more storage space	MOSAIC
	19. Hall too small	MOSAIC
	20. Hall sometimes not clean, no paper or soap in toilets	MOSAIC
	21. Opening times of toilets irregular	Wai Dan Gong
	22. Air conditioner not working	MOSAIC
	23. Current liquor licence requirements need investigation	Performing Arts Unit
Shade	24. Not enough shade around oval or basketball court	Our Lady of Delours Wai Dan Gong
Playground	25. Playground only suits toddlers	Public Meeting 8 submissions
	26. Needle sweep of sandpit necessary before use	Our Lady of Delours 1 submission
	27. No toilets in lower part of park	Public Meeting
	28. No BBQ facilities	1 submission
	29. Stones around slippery dip are dangerous	1 submission
	29A. Steel structure over sandstone in 'International Grove' is unsafe.	Public Meeting 1 submission

TABLE 1.1 (contd.): ISSUES SUMMARY FOR BEAUCHAMP PARK

ISSUE	PROBLEMS RAISED	RAISED BY
Park maintenance	30. Maintenance of planted beds and water management is poor	Public Meeting 5 submissions
	31. Graffiti, vandalism, antisocial behaviour and rubbish from youths	Public Meeting 1 submission
	32. Dumping of rubbish on Nicholson St. verge	Public Meeting
	33. Diagonal path needs repair	Public Meeting
	34. Path on Beauchamp Ave narrow and needs repair	Public Meeting
Access	35. Poor pram access in SW corner	1 submission
Basketball Court	36. Noise from basketball court at night	Public Meeting 2 submissions
Parking	37. Difficult to park in streets because parking is monopolized by workers, shoppers and commuters.	Public Meeting 1 submission
	38. Cars parked dangerously close to corners and crossings	Public Meeting
	38A.Speeding cars down Nicholson St.	1 submission
Safety	39. Poor lighting on diagonal path	Public Meeting
B. ADDITIONAL ISSUES IDENTIFIED BY BIODESIGN & ASSOCIATES		
Ecology	40. The remnant Blue Gum High Forest trees need recognition, protection, replacement and management	
	41. The lower section of the park is much richer, is more complex & has a better microclimate than the upper section.	
	42. Water sensitive urban design practices (WSUD) need to be explored and implemented in the park.	
	43. Some old, dead or hazardous trees need to be removed, pruned or replaced.	
	44. Many of the conifer plantings on the western boundary are unhealthy as well as being environmentally unsound.	
	45. The Cotoneaster hedge (listed undesirable weed in Willoughby) needs rethinking	
	46. A number of plants are weeds or undesirable species.	
	47. The bank overlooking the oval is eroded and grass is difficult to mow on steep bank.	
Community	48. Disabled access in two places at the western end of the park does not meet Australian standards	
	49. A number of paths need repair or replacement and a connecting path is needed along Beauchamp Avenue.	
	50. A number of seats and picnic tables need repair/replacement and spectator seating around the oval is in poor condition.	
	51. There are no BBQ's or shelters in the park	
	52. There is no entry sign on the corner of Darling and Nicholson Streets	

TABLE 1.1 (contd.): ISSUES SUMMARY FOR BEAUCHAMP PARK		
ISSUE	PROBLEMS RAISED	
Delight	53. The upper section of the park lacks a 'sense of place' and is physically and visually disconnected from the lower section.	
	54. The upper section has views out of the park which need to be retained.	
	55. Street tree plantings are not coordinated with other trees in the park.	
	56. The 'International Grove' (SE of the playground) has the potential to be a delightful play space but needs renovation.	

1.3 How Beauchamp Park Performs in Terms of the Legislation

In general terms the Park is currently being managed in accordance with the requirements of the relevant legislation and Council's policies. The following issues are noted:

1. There are inherent problems with complying with council's controls relating to sustainability and heritage in relation to the use of Phoenix Palms and other exotic species.
2. When considered in terms of what is possible in this park, environmental practices with regard to water sensitive urban design and biodiversity preservation are poor, particularly in the upper section, but also in relation to the remnant Blue Gum High Forest in the lower section.
3. Some of the plantings in the park contravene the NSW Noxious Weeds Act.
4. Access for people with disabilities does not fully meet the legislative requirements.
5. Lighting is inadequate in the park.
6. The 5 to young teens age group of youth is not well-catered to in the park.
7. Covered picnic facilities are not available for older people.
8. The park already supports the Willoughby City Strategy, 2006 but it has excellent potential to improve the quality of this support.

1.4 Opportunities

A number of opportunities were identified in the park during the study and site analysis process:

1. The large old remnant trees of the Blue Gum High Forest and a variety of fauna (particularly birds) that use them provide a valuable opportunity for interaction with nature in the city. Interpretation relating to its ecological values would increase user-enjoyment of the park and promote such activities as bird-watching, deeper understanding of the heritage values of the trees and an interest in supporting their management needs.
2. The existing mature trees provide an excellent structure and character to the lower part of the park. They provide a sound basis for species selection for trees throughout the park and along its street frontages that would help unify the two sections of the park and give it a clear, locally relevant 'sense of place'. It would be possible to harvest seed from the

remnant indigenous trees for production of plant material for future replacement tree plantings (where heritage issues are not a concern).

3. It would be possible to harvest the stormwater from the oval and store the water in tanks built into the embankment on the eastern side of the oval as would harvesting the rainwater off the pavilion roof for reuse in flushing toilets. The harvested water could then be used to irrigate both the oval and the planting beds, which is more sustainable in the long term, would make the park more self sufficient, reduce consumption of mains water, and set a good example for the community.
4. The existing playground is well-sited and has ample space. The opportunity exists to add furniture for older children and incorporate additional facilities nearby.
5. The opportunity exists to make a larger, more useable open space for picnics or children's play by selectively removing a few internal garden beds. It would also be possible to concentrate colourful, drought-tolerant plants along the main path where they could form a display. The other beds could be replanted with local understorey species which do not require so much maintenance or watering. This would improve outcomes for old remnant trees.
6. It would be possible to create a strong central link between the upper and lower parts of the park by constructing a new viewing platform and steps on the eastern side of the oval overlooking the playground. This could be coordinated with the construction of water tanks, a unisex parents /disabled toilet and nearby BBQ facilities both for ease of construction and to partly conceal the facilities in the embankment.
7. The existing pavilion is well sited in relationship to the oval. However, a larger hall, a larger covered verandah for spectators, more storage, better canteen facilities and separate change rooms and umpire facilities would mean that the pavilion could be used by more community groups and for a wider range of functions.
8. As parking for the oval and pavilion could be catered for along Nicholson Street it would be possible to remove the existing carpark and use the land for more sporting or leisure activities, such as a BBQ and picnic facilities. Vehicular access to the pavilion and oval would, however, need to be maintained.
9. Providing the land ownership issues are not a problem it would be possible to incorporate Beauchamp Avenue more fully within the park by narrowing and resurfacing a one way access road, creating parking bays, providing planting areas around the existing trees and constructing a new pathway which would allow pedestrians to freely access the lower part of the park from the upper section.
10. The role of the park as the "square" which is the focus of the townscape within a heritage conservation zone could be exploited for local community gatherings and celebrations. In the past there have been occasional community celebrations in the park. Festivals provide a valuable means of building communities and, in particular, can engage local youth and help them contribute to their community in enjoyable ways. The central location of the park in the Chatswood area makes it an ideal venue for a regular community festival or events.

1.5 Recommendations

TABLE 1.2: RECOMMENDATIONS FOR BEAUCHAMP PARK		
A. FOR ISSUES IDENTIFIED THROUGH COMMUNITY CONSULTATION		
ISSUE	PROBLEM	RECOMMENDATION
Shared use of oval	1. Conflict between people/sports groups and dogs/dog owners	Look at (1) a separate fenced off-leash dog area in park or (2) setting time limits for dogs off leash on the oval (late afternoon and early mornings) to allow more separation between dogs and children/sporting groups.
	2. Dog poo on oval/dog poo collection not policed	Provide more poo bins/bags and police more frequently.
	3. Limited access for rugby on Sundays	Investigate schedules and policing of schedules. Investigate installation of a notice board to advise residents of bookings on oval.
	4. Encroachment on cricket season by rugby club	
	5. Conflict with corporations at lunchtime	
	6. Conflict with social groups who use pavilion	
	7. Conflict in sharing change room toilets between sporting groups and community groups	See problems 13-19.
Oval maintenance	8. Oval boggy on western side around cricket pitch	Improve drainage.
	9. Wear and tear of oval surface	Explore other options for training to reduce use of oval (see problem 11).
	10. Closure of oval after slight rain & slowness to reopen	WCC to investigate solutions.
	11. Hardness of grounds due to drought	Investigate water harvesting and storage for irrigation of the oval.
Oval size	12. Oval undersized and only a single playing area; need room to expand	Investigate building up of SE corner of oval and refencing to improve field. Explore removal of carpark to provide more active space, explore use of other playing fields and other options for training.
Pavilion	13. Grandstand doesn't provide enough protection	Investigate renovation of existing pavilion to provide large verandah area, more storage space, improve disabled access Include solar panels for energy supply; energy & water efficient design & fittings and rainwater tanks for toilet flushing in renovations where possible. Install a practice soccer net and remote controlled scoreboard. Remove trees 102 and 103 between pavilion and oval. Investigate a commercial use of pavilion such as a café or kiosk.
	14. Disabled access to pavilion is poor	
	15. Lack of separate change rooms	
	16. No permanent scoreboard	
	17. No lockable space in kitchen	
	18. Need more storage space	
	19. Hall too small	
	20. Hall sometimes not clean, no paper or soap in toilets	
	21. Opening times of toilets irregular	
	22. Air conditioner not working	
		Check management of hall and toilets.
		Investigate alternative to air conditioning (see problems 13-19).

TABLE 1.2 (contd.) RECOMMENDATIONS FOR BEAUCHAMP PARK		
ISSUE	PROBLEM	RECOMMENDATION
	23. Current liquor licence requirements need investigation	Investigate liquor licence.
Shade	24. Not enough shade on oval or basketball court	Plant more local trees around oval and between the basketball court and the carpark.
Playground	25. Playground only suits toddlers	Install new equipment for wider range of ages in separate areas but within existing footprint, investigate a bicycle track and adventure/water play incl. flying fox. Build on the existing character of the playground by utilising the existing planting beds, tree trunks and bushland character of the park.
	26. Needle sweep of sandpit necessary before use	WCC to monitor.
	27. No toilets in lower part of park	Investigate construction of a unisex/disabled toilet near playground.
	28. No BBQ facilities	Investigate BBQ facilities vs picnic facilities only near playground.
	29. Stones around slippery dip are dangerous	WCC to check.
	29A. Steel structure over sandstone in 'International Grove' is unsafe.	Make safe existing structure.
Park maintenance	30. Maintenance of planted beds and water management is poor	<p>Replace existing understorey plants along diagonal path with flowering, drought-resistant plants with same character with existing Camellias and Azaleas. Investigate using Blue Gum High Forest understorey plants in the less trafficked areas. Retain rose garden in current form but look at ways to reduce water and weeding demands such as mulching and reducing grass between beds.</p> <p>Investigate water harvesting alternatives to provide irrigation to planting beds in times of water restrictions (see problem 42).</p>
	31. Graffiti, vandalism, antisocial behaviour and rubbish from youths	Provide better lighting (see problem 39) and policing of park at night.
	32. Dumping of rubbish on Nicholson St. verge	Remove concrete pad and find alternative location for stockpiling park green waste (provide mulching machine?)
	33. Diagonal path needs repair	WCC to coordinate repairs.
	34. Path along Beauchamp Ave narrow and needs repair	Investigate incorporating Beauchamp Avenue into park and providing new etween Rose St. and ppath playground.
Access	35. Poor pram access in SW corner	Provide pram/disabled access in SW corner.

TABLE 1.2 (contd.) RECOMMENDATIONS FOR BEAUCHAMP PARK

ISSUE	ISSUE	ISSUE
Basketball Court	36. Noise from basketball court at night	Remove conifers beside basketball court to increase surveillance from street. Investigate fencing/locking of court for security purposes Remove carpark (see problem 12) or investigate closing of gates to carpark at night. Look at making court multi-purpose.
Parking	37. Difficult to park in streets because parking is monopolized by workers, shoppers and commuters.	Investigate 2-3hr time limits and parking meters to streets adjoining park without penalising residents. WCC to address increased patrolling of parking restrictions.
	38. Cars parked dangerously close to corners and crossings	Provide greater setbacks at corners and crossings
	38A.Speeding cars down Nicholson St.	Investigate 40km zone or better policing.
Safety	39. Poor lighting on diagonal path	Provide new energy efficient lighting with underground wires to diagonal path and elsewhere in park as necessary. Engage ornithologist to ensure proposed lighting in park does not affect bird habitat.

B. ADDITIONAL ISSUES IDENTIFIED BY BIODESIGN & ASSOCIATES

ISSUE	PROBLEM	RECOMMENDATION
Ecology	40. The remnant Blue Gum High Forest trees need recognition, protection, replacement and management.	Develop Tree Masterplan for park from Tree Issues Report (see Part 3). Undertake study of infected trees with <i>Ganoderma spp.</i> Where possible remove built-up garden beds from around base of remnant trees or replace water-loving plants with drought-resistant ones (see problem 30.)
	41. In terms of microclimate and ecology the lower section of the park is much richer and more complex than the upper section.	Plant upper section of park with local tree and shrub species to provide shade and shelter, and bring back habitat and birds (see problem 44).
	42. Water sensitive urban design practices (WSUD) are lacking in the park.	Explore water harvesting from oval runoff and pavilion roof (see problems 13-19)
	43. Some old, dead or hazardous trees need to be removed, pruned or replaced.	Undertake tree surgery combined with Tree Masterplan (see problem 40).
	44. Many of the conifer plantings on the western boundary are unhealthy as well as being environmentally unsound.	Replace conifers over time with local species (see problem 40).

TABLE 1.2 (contd.) RECOMMENDATIONS FOR BEAUCHAMP PARK		
ISSUE	ISSUE	ISSUE
	45. The Cotoneaster hedge (listed undesirable weed in Willoughby) needs rethinking.	Remove or replace existing Cotoneaster hedge with a more suitable species.
	46. A number of plants are weeds or undesirable species.	Remove weeds where possible (see Part 3 -Tree Issues Report).
	47. The bank overlooking the oval is eroded and grass difficult to mow on steep bank.	Replace grass on bank with trees, ground covers and low shrubs.
Community	48. Disabled access in two places at the western end of the park does not meet Australian standards.	Provide disabled access.
	49. A number of paths need repair or replacement and a connecting path is needed along Beauchamp Avenue.	Repair/replace paths.
	50. A number of seats and picnic tables need repair/replacement and spectator seating around the oval is in poor condition.	Repair/replace furniture. Reconstruct spectator seating.
	51. There are no BBQ's or shelters in the park.	Explore the removal of some garden beds to create larger open spaces for other facilities such as BBQs and shelters.
	52. There is no entry sign on the corner of Darling and Nicholson Streets.	Install new entry sign.
Delight	53. The upper section of the park lacks a 'sense of place' and is physically and visually disconnected from the lower section.	See problem 41. Construct a viewing platform and stairs between the eastern side of oval and the playground. Possibly coordinate the platform with unisex parents /disabled toilet and rainwater tanks built into the oval embankment.
	54. The upper section has views out of the park that need to be retained.	Ensure any new plantings maintain views out of the park.
	55. Street tree plantings are not coordinated with other trees in the park.	See problem 40.
	56. The 'International Grove' (SE of the playground) has the potential to be a delightful play space but needs renovation.	Upgrade this area for a story-telling area and cubby house.

ADDITIONAL RECOMMENDATIONS:

57. Whilst no major changes or additions have been identified in Beauchamp Park as a result of this study, incremental changes over the years have impacted on its ecology, character and aesthetics and numerous small changes are now proposed. We therefore recommend that Council prepare a Landscape Masterplan for the park which incorporates a Tree Masterplan

and guidelines for selection of materials and colours. Develop guidelines for selection of materials and colours.

58. Hold a workshop, particularly with local youth, to investigate ideas and possibilities for community festivals/events/activities that could be held in the park. Suggestions from residents included social events on summer evenings during the school holidays such as regular come and meet the neighbours evenings, a mid-summer festival with BBQ, and Australia Day breakfast and a back to school event. Lunch-time sporting activities (especially autumn/winter months) on the oval for workers, similar to the Domain in the city, perhaps sponsored by employers also would be possible.
59. Using the Tree Assessment as a basis, explore the educational opportunities for children and adults to appreciate the environmental qualities of the park. Provide interpretation within the park to teach residents about the natural heritage of the park.
60. Maintain the existing character of the park as a town square within a heritage conservation zone ensuring that any changes are small, discrete and consistent with this character.

Beauchamp Park, Chatswood ISSUES REPORT

PART 2: DETAILED STUDY AND SITE ANALYSIS

for Willoughby City Council



BioDesign & Associates Pty Ltd
August, 2007

BEAUCHAMP PARK ISSUES REPORT

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Part 2 provides the detailed findings of the information review, site analysis and consultation with community and stakeholders, presented in text, graphics and tables and supported by appendices. It enables an understanding of how the issues were identified and the basis of the recommendations.

Part 3 contains the findings of the tree assessments and details of the specific tree management issues in the park. It includes recommendations and maps summarising the data.

The report was prepared by Sue Holey B. Sc, an environmental scientist and arborist, and Barbara Buchanan, B. L. Arch. (Hons 1), a landscape architect.

PART 2 – DETAILED STUDY AND SITE ANALYSIS

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2.1. Background

2.1.1. Methodology

Beauchamp Park was analysed first in terms of its legislative context and secondly through a site analysis based on the Ecology/Community /Delight model (ECD) put forward by Ian Thompson (Thompson, 2000). This model has been used to ensure that all aspects of the park are addressed and to achieve a balanced approach.

Refer to Appendix A for details of the methodology.

2.1.2. Site Overview

Location

Beauchamp Park is located on the lower north shore of Sydney (Figures 1 and 2) towards the northern edge of the Willoughby City Council local government area (LGA) within the Chatswood East Ward. The park lies two blocks east of the North Shore Railway Line and one block northeast of the Chatswood Central Business District, which is a designated regional centre and major retail precinct. The park is bounded by Nicholson St to the south, Darling St to the east, Rose St and Beauchamp Avenue to the north and the back of a row of houses which face onto Edmund St to the west.

Site description

Beauchamp Park has an area of 4.533 ha. It is made up of three parcels of land (Figure 3) as follows:-

Lot 7123 DP1066043 – the main body of the park

Lot 1- DP 1070515 – a small strip of land adjoining Rose Street

Part Lots 3-9 DP 111189 – now Beauchamp Avenue. Further investigation is required to determine whether this parcel of land is part of the park or a designated road reserve.

The park has been described as having district significance (WCC, 1997 p11; and Manidis Roberts 1996, p33).

The park as it currently exists is in two distinct sections. The upper section contains a fenced rugby/cricket oval, pavilion with small hall, change rooms and toilet, spectator seating, a carpark (approx. 15 cars), an access road and a basketball court. The lower section, which has a large number of established trees in grass and planting beds, contains a toddler's playground, sculptures, picnic tables, seats and ancillary spaces that are used for passive recreation. The remains of a circular fountain and plantings which were part of the "International Grove" installed in 1965 to commemorate the centenary of the Municipality (see Timeline, Section 3.2.1) are located near the corner of Nicholson and Darling Streets.

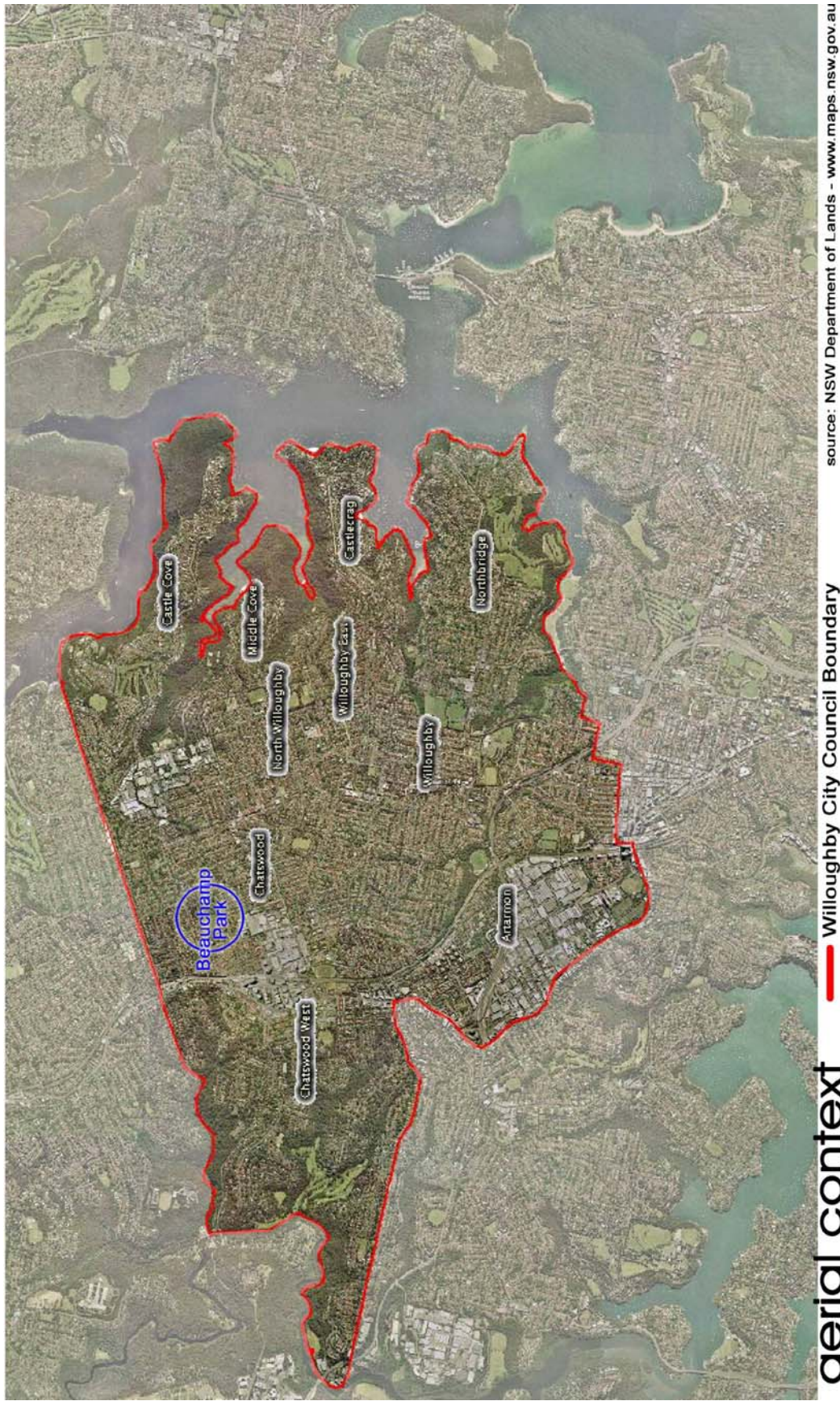
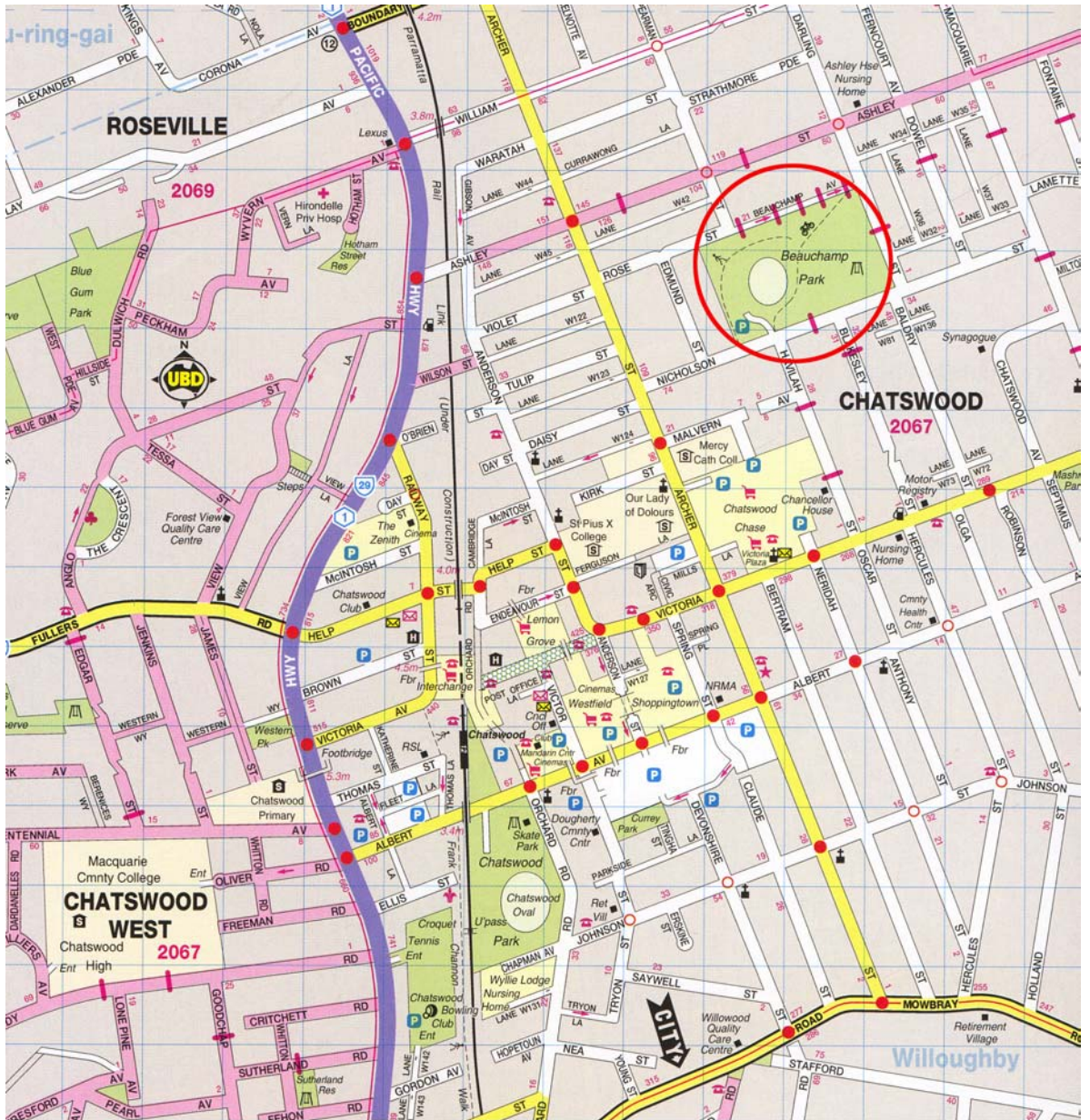


Figure 1: Aerial photograph with the Willoughby area outlined in red and Beauchamp Park circled.



FREEWAY		PARK, RESERVE, OVAL		AMBULANCE STATION		CAR PARK	
PROPOSED FREEWAY		SCHOOL, HOSPITAL		BARBECUE		COLLEGE - PRIVATE	
HIGHWAY or MAIN ROUTE		MISCELLANEOUS AREA		BOAT RAMP		COLLEGE - PUBLIC	
ALTERNATE ROUTE		MALL, PLAZA		BOWLING CLUB/GREEN		CYCLEWAY	
TRAFFICABLE ROAD		SWAMP		CAMPING AREA		DISTANCE FROM GPO	
PROPOSED ROAD				CARAVAN PARK		EMERGENCY TELEPHONE	
EXPRESS POST BOX		HOTEL / MOTEL		ONE-WAY TRAFFIC ROUTE		RED LIGHT CAMERA	
FIRE STATION		INFORMATION CENTRE		PICNIC AREA		ROUNDBOUT	
FIXED SPEED CAMERA		LIBRARY		PLACE OF WORSHIP		SCHOOL - PRIVATE	
GOLF COURSE		LOOKOUT 180, 360		PLAYGROUND		SCHOOL - PUBLIC	
GUIDES / SCOUTS		MEMORIAL / MONUMENT		POLICE STATION		SERVICE STATION	
HOSPITAL				POST OFFICE		SHOPPING CENTRE	
						SWIMMING POOL	
						TELEPHONE	
						TOILETS	
						TRAFFIC LIGHT	
						WEIGHBRIDGE	
						WINERIES	

local context

source: UBD 2006 Sydney & The Blue Mountains Street Directory, 42nd edition

Figure 2: Street directory map showing location of Beauchamp Park (circled) in Chatswood.



source: Willoughby City Council

land titles map

Figure 3: Land titles map showing the three lots that comprise Beauchamp Park.

2.1.3. The Legislative Context

Beauchamp Park is a Crown Land Public Park (P500029 in the Lands Dept file and R500029 in WCC files) proclaimed under the Public Parks Act on October 25, 1899. The park is managed by Willoughby City Council as Community Land for the purposes of public recreation or conservation (Reserve Profile, Dept. of Lands, 8 Dec, 2006 and pers. comm., Nick Roesler, WCC 12/12/06).

Crown Lands Act 1989

The NSW Crown Lands Act 1989 governs the use and management of Public Reserves. Section 11 of the Act lays out the principles and is particularly relevant to this site.

CROWN LANDS ACT 1989 - SECT 11

11 Principles of Crown Land Management

For the purposes of this Act, the principles of Crown Land management are:

- (a) that environmental protection principles be observed in relation to the management and administration of Crown land,
- (b) that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible,
- (c) that public use and enjoyment of appropriate Crown land be encouraged,
- (d) that, where appropriate, multiple use of Crown land be encouraged,
- (e) that, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity, and
- (f) that Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles.

NSW Environmental Planning and Assessment Act (1979)

Any developments proposed for the site will have to comply with the requirements of this act and the legislation which is enabled by this act.

NSW Threatened Species Conservation Act (1995)

A full flora and fauna survey was not conducted on this site. However the site contains vegetation that is classified as a remnant of the Blue Gum High Forest a listed ecological community, and therefore, prior to any development being approved, a seven part test under section 5(A) of this act may need to be completed to determine whether any adverse impacts on the listed community would arise from the development.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

This SREP provides a set of clear planning principles for land within the Sydney Harbour Catchment that the masterplan and any future developments proposed for Beauchamp Park must consider.

Willoughby Local Environment Plan (LEP) 1995

Under the Willoughby LEP 1995 Beauchamp Park is zoned 6(a) Open Space 'A' – Existing Recreation (Figure 4).

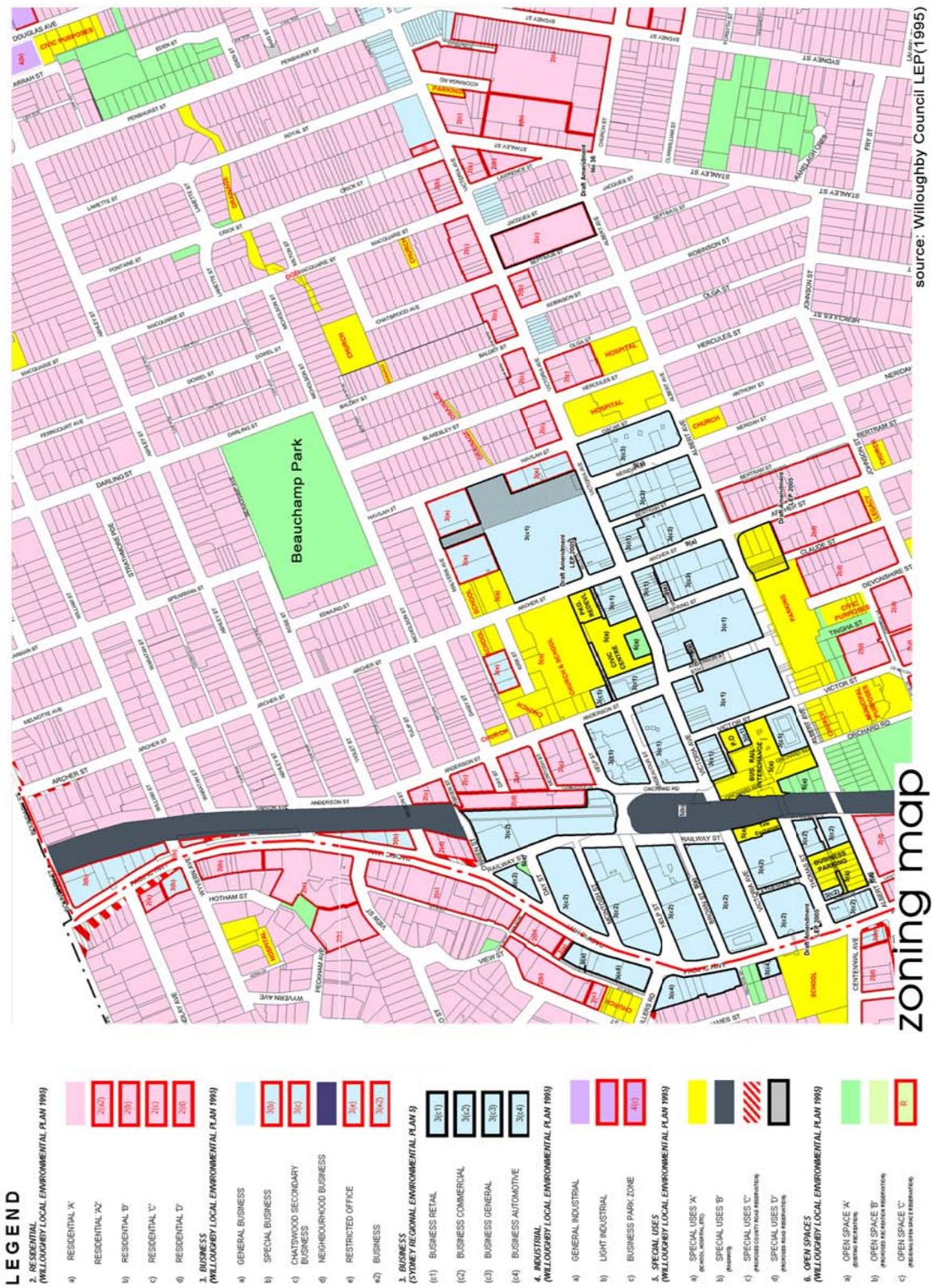


Figure 4: LEP zoning map showing Beauchamp Park zoned as public open space.

Willoughby Development Control Plan 2006

A number of sections of the Willoughby Development Control Plan 2006 (WDCP) were identified as being relevant to this site as follows:

C.3 Sustainable Development

The purpose of this section is to improve the environmental sustainability of the Willoughby environment and in so doing, contribute to the conservation of natural resources and global environmental improvement (p.C6).

Specifically this section aims to:

- minimise consumption of resources including energy, water, waste and soil;
- facilitate comfortable and long term cost efficient development;
- improve resident, employee and construction workers' comfort and health;
- minimise pollution of air, soil and water;
- encourage design for durability and long life; and
- protect biodiversity.

These aims are achieved by:

- facilitating energy efficient development and water conservation design to assist in creating sustainable environments;
- encouraging the reduction in the use of fossil fuels and encouraging use of renewable energy;
- providing for more efficient usage of water and improving water quality;
- encouraging landscape design to assist in microclimate management and for the conservation of energy and water;
- encouraging waste reduction both during construction and building occupation;
- encouraging the use of sustainable resources;
- encouraging sustainable transport, good energy management and discouraging the use of CFCs and HCFCs; and
- encouraging durable and longlife design which is adaptable and has low maintenance.

C.5 Water Management

The objectives of this control are to ensure that all development undertaken in the WCC area:

- applies Water Sensitive Urban Design (WSUD) principles which minimize impacts on the natural water cycle;
- fosters ecological sustainability;
- provides a safe and effective framework for the control, re-use and disposal of rainwater and stormwater;
- reduces flooding risk in urban areas;
- maintains public health and safety;
- uses water resources efficiently;
- improves water quality within natural watercourses and receiving waters by:
 - protecting groundwater,
 - controlling soil erosion during and after construction of the development,
 - minimizing pollution, and
 - reducing the amount of pollution entering natural water bodies;
- protects and restores aquatic, riparian and estuarine ecosystems, vegetation and habitats;
- protects the scenic, landscape and recreational values of natural watercourses and receiving waters; and
- prevents, mitigates and controls land degradation.

C.6 Access, Mobility and Adaptability

The Disability Act makes it unlawful for public places to be inaccessible to people with a disability. This control provides for minimum development standards based on the principle of “a continuous accessible path of travel” being a fundamental requirement in the provision of access for all people that enables people with disabilities to use the facilities independently, equitably and with dignity.

C.7 Bushland and Bushfire Hazard Management

The park is not mapped as bushfire prone land (Figure 5). The park’s location in a highly urbanised part of the city unconnected to any classified bushfire prone land means that there are no bushfire restrictions on building in Beauchamp Park nor any need to clear understorey for hazard reduction.

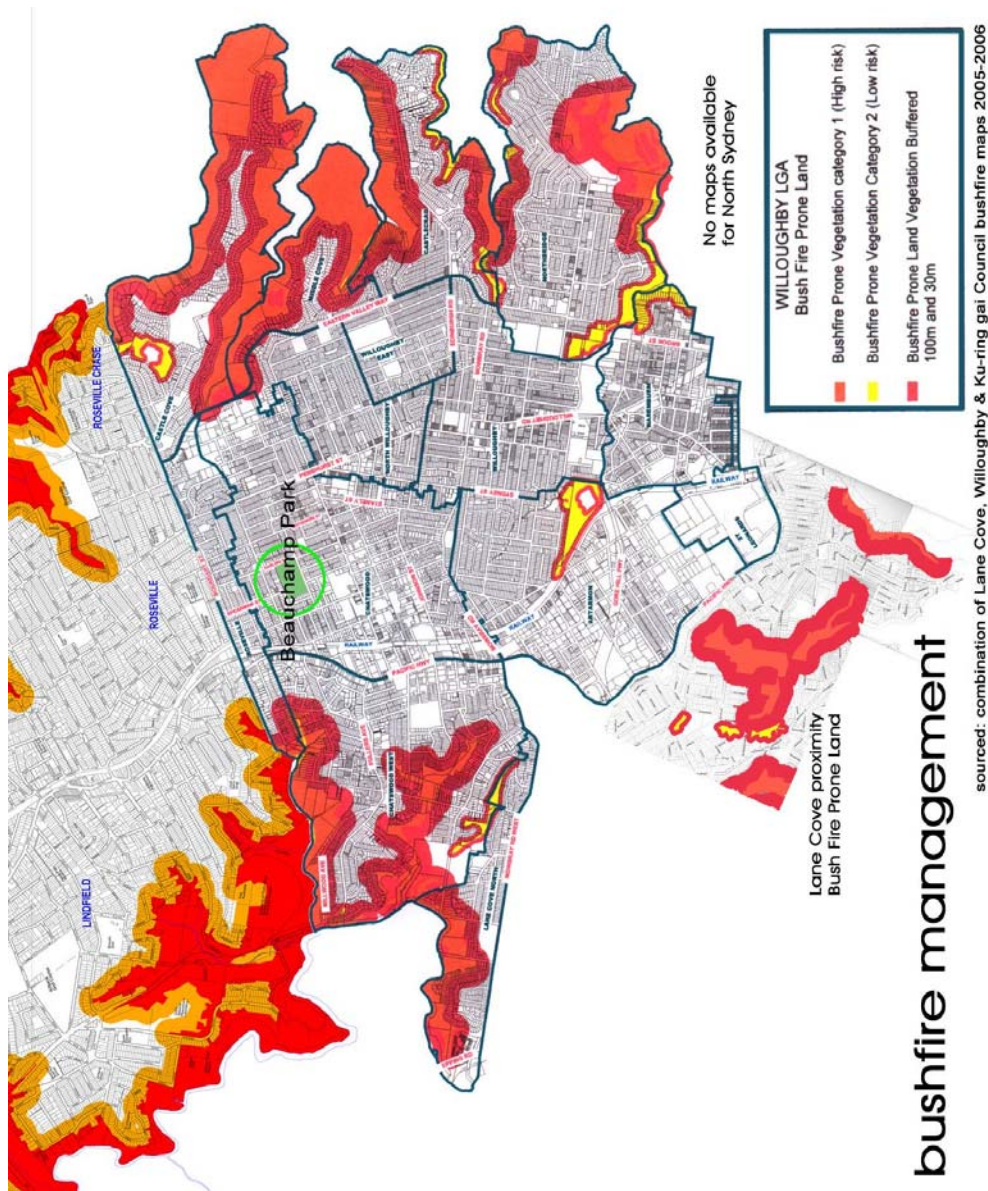


Figure 5: The Bushfire prone land map for Willoughby. Beauchamp Park is not mapped.

C.9 Landscaping

This section identifies performance criteria for landscaping to residential, flat, mixed use and commercial developments. Those relevant to Beauchamp Park are as follows:

- be sensitive to site attributes such as significant trees, land capability (soil type and slope), microclimate (especially access to sunlight), views and natural features such as rock formations, watercourses and cliff escarpments;
- retain significant trees, especially to the street, to maintain the existing character of the locality;
- reinforce the landscape character and important environmental qualities of the locality; use species, which are indigenous/endemic to the area as the predominant vegetation type and to reduce maintenance and minimise water utilisation;
- take account of the location of buildings in the selection of species, contribute to the solar efficiency of a building by selecting and positioning trees for shade in summer and solar access in winter and shade open car parking areas;
- minimise the dominance of buildings when viewed from the street, foreshore or bushland;
- protect significant views from private property and public areas
- minimise the amount of hard surfaces (driveways, paved areas etc) to increase site absorption and decrease surface runoff
- reduce or eliminate any potential for soil erosion or weed establishment
- landscape treatment along paths, driveways and road intersections should ensure good visibility.

C.11 Safety by design

The following four crime prevention principles which are to be considered in the design of new developments also apply to new developments in Beauchamp Park:

- Surveillance- people can see what others are doing;
- Access control - physical and symbolic barriers that can be used to attract, channel or restrict the movement of people;
- Territorial reinforcement –clear design cues on who is to use space and what it is used for; and
- Space management- ensuring that space is appropriately utilised and well cared for.

Controls:

- Natural security of the street and the entry point of buildings can be achieved by:
 - Providing front entries with high visibility;
 - Careful siting of shrubs and landscape elements
 - Lighting of pathways or hidden spaces.
- The use of high walls or fences is not considered to be an effective security measure because of the ability to conceal intruders and the potential for graffiti.
- Determine a functional hierarchy of spaces, leading from the public to private spaces with clear definition of territory and ownership, using landscaping, fencing or paving materials
- Pedestrian site access and car parking are to be direct, clearly defined, visible and provided with adequate lighting.
- Entries to buildings should be clearly visible from the street and internal driveways, with general surveillance of the site and approaches to entries possible from inside the building
- Arrange buildings to overlook public areas and communal streets to maximise surveillance

- Avoid high fences and walls or high dense landscaping which can conceal intruders, adjacent to entries or windows to ensure safety and surveillance.
- Avoid the creation of public spaces that are little used or observed.
- Provide clear lines of sight from parking areas ... and well lit routes.

D.1(3) Specific Controls for Residential Development

Beauchamp Park is located in the northern part of Locality 6 – Artarmon, Chatswood (east of the Pacific Highway), Willoughby and Roseville (Figure 6). The character of the locality is described (p.D26-7) as one of “predominantly single storey detached housing with a mixture of styles ranging from Federation, Californian and Interwar bungalows of the 1920s-1930s, contemporary styles of the 1950s and 1960s with some late Victorian mansions located in south Chatswood”. The terrain is flat to gently undulating. The subdivision pattern is a rectilinear grid with allotment sizes and setbacks of dwellings from the street frontage being generally consistent in individual streets. Generally the properties have open garden frontages and low face brick, masonry or palisade fencing. A wide range of street trees include Jacaranda, Bottlebrush, Oleander, Eucalypts and Liquidamber. The primary street character is created by the avenue of trees and landscaped front gardens with the dwellings as secondary elements (p.D27).

Some of the guidelines to achieve the “Desired Future Character” of Locality 6 that are relevant to the park (p.D28) are as follows:-

- Maintaining a consistent front building alignment of landscaped gardens to the street
- Retaining landscaping settings by minimising the extent of driveways and paved surfaces at the street frontage.
- Protecting mature trees in rear gardens, which form a backdrop to streetscapes

H.3(1) Heritage Conservation Areas

Within Locality 6 described above, Beauchamp Park is located on the southern side of the North Chatswood Conservation Area (Figure 6), a residential area with predominantly single storey detached housing in Federation or Interwar bungalow styles (1880-1930). The streetscape is characterised by regularly spaced buildings of similar scale and bulk, mature landscaped gardens and well established street trees such as Brush Box and Canary Island Palms. Beauchamp Park is identified as the “square” or focus in the townscape (p.H31). The management policies that are relevant to the park are those that relate to the streetscapes, as follows (p.H31):-

- Retain the scale, form, massing and detailing of original buildings of heritage, the typical scale, rhythm and character of individual streetscapes.
- Retain landscaped settings by minimising hard surfaces forward of the building line...and maintaining the existing patterns of low/semi transparent fencing to the street.

The “Controls for future development – North Chatswood” (p.H32) state that landscaping to residences shall have “mature well vegetated front gardens with exotic shrubs and trees’.

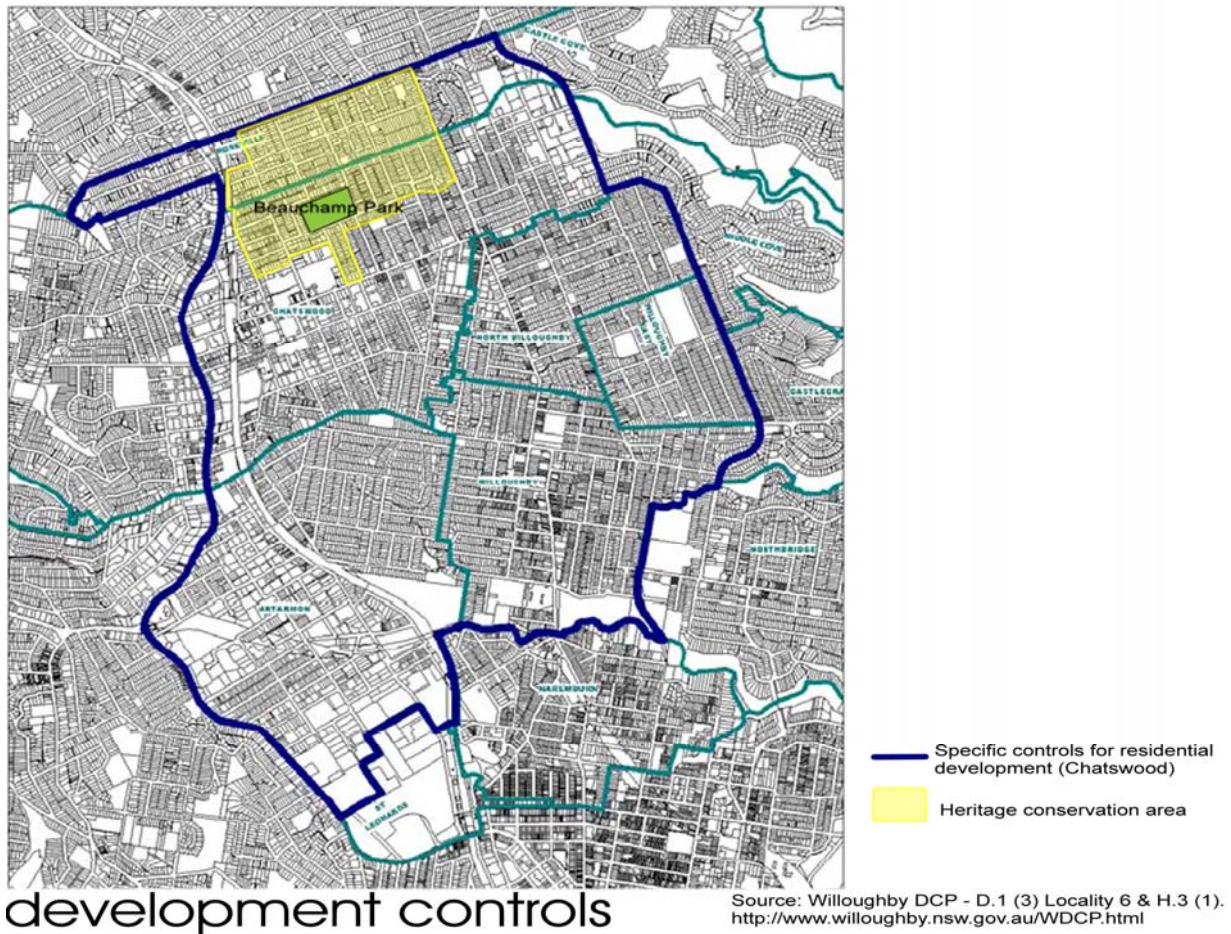


Figure 6: Plan showing Beauchamp Park's location within a heritage conservation area in a residential zone of Chatswood.

Willoughby Council Policies and Plans

Willoughby City Council has prepared or commissioned a number of reports and plans which are of relevance to Beauchamp Park. They are:

- *Summary of 1993 Recreation Plan* (Willoughby City Council, 1995)
- *Open Space Plan* (Manidis Roberts Consultants, 1996)
- *Urban Bushland Plan Volume 1: Policy* (Willoughby City Council, 1997)
- *Plan of Management – Chatswood East Ward Parks* (Willoughby City Council, July 1997)
- *Environmental Management Plan for the City of Willoughby* (R. Blackburn, 2000)
- *Revised Stormwater Management Plan 2003-2006* (Willoughby City Council, October 2003)
- *Willoughby City Strategy* (Willoughby City Council, March 2006)

Key issues identified in these reports are summarised below:

Summary of 1993 Recreation Plan, April 1995

This plan aimed to provide a framework for the provision of recreation within Willoughby. The recommendations for recreation facilities rated as high priority that could apply to Beauchamp Park are as follows:-

- 6.8.1 Children (0-14 yrs) - provide off-road bicycle paths and skateboarding, rollerblading and BMX opportunities
- 6.8.2 Young people (15-19 yrs) – provide outdoor basketball courts, provide skateboarding and rollerblading opportunities
- 6.8.3 Adults/Families - improved picnic/BBQ areas
- 6.8.4 Aged (65+ yrs) – provide one undercover picnic area

Other recommendations of high priority that apply to Beauchamp Park are:-

- 6.8.5 Access – ensure that recreation facilities and services are accessible

Open Space Plan 1996

The three key demands of the Willoughby community identified in the report (p.ii) are:

- Walking for pleasure is the most popular recreational activity and foreshores are considered the most favourable places for this recreational pursuit. Access to foreshore areas and links between them, where appropriate, was considered important.
- Young people are the largest user group of open spaces and their needs are not well catered for.
- Developed urban parks, with a combination of recreational opportunities are the most popular unstructured recreation and should be better catered for.

Urban Bushland Plan. Volume 1: Policy, 1997

The Urban Bushland Plan of Management aims include:

- Management of bushland for its aesthetic, recreational, educational and scientific values to the community;
- Manage bushland to maximise its value as part of the natural heritage of Willoughby; and
- Manage bushland in such a way as to maintain biodiversity of locally indigenous species and communities in the long term.

The site has remnant vegetation and opportunities exist to support these aims.

Plan of Management (PoM) – Chatswood East Ward Parks, 1997

The current PoM (1997), which was prepared by Peter Thyer of Lanscope Pty Ltd, identifies a wide range of issues, opportunities and actions for Beauchamp Park and the other parks within the East Ward Park System. It also makes recommendations for a system of 'Linkpaths', 'Green Ways' and 'Play Streets' to link the various parks and to create safe, pleasant walkways and cycleways between the various parts of the ward. Beauchamp Park is identified as the largest and most popular park in the East Ward.

“The park is popular because it provides many different recreational opportunities, it is well kept and the flower gardens are colourful; the trees create a peaceful setting; the park is large enough to give separation from surrounding houses and not be crowded by the many users” (p.25)

The key issues identified in the PoM (p.28) were:-

- Keep the existing open feeling
- Provide seats, picnic tables, toilet and lighting near Darling Street
- Keep and care for the trees and gardens
- Improve the playground
- Control dogs and anti-social night time behaviour
- Control car parking and traffic

The most significant actions recommended in the PoM (p.6) were:-

- Installation of a toilet near the playground
- Installation of 3 picnic tables with shelters, and other seats and tables
- Relocation of public toilets into the lower section of the pavilion
- New sensory garden
- Introduction of car parking restrictions

Of these only the relocation of the public toilets and the partial introduction of car parking restrictions have been implemented. Other changes recommended in the PoM that have since been implemented include:-

- Planting of deciduous trees on the bank north and west of the oval
- Continued planting of Casuarinas on the eastern bank of the oval

Environmental Management Plan for the City of Willoughby, 2000

Preparation of the plan included findings from community consultation. The plan sets a number of goals aimed at improving the environment and moving towards sustainability in resource use. The activities and development at Beauchamp Park sit within the framework of the plan.

Revised Stormwater Management Plan 2003-2006

The plan identifies as a key project the development and adoption of “a new Stormwater focused Development Control Plan that uses the principles of Water Sensitive Urban Design (WSUD)”. Development in the park would be subject to such a control and the site offers some opportunities to provide models of WSUD to help with community education.

Willoughby City Strategy, 2006

The community consultation for this strategy identified (p.13), with regard to places like Beauchamp Park, that people value:

- Access and links via public and private transport
- Quality of life / life balance
- Diversity of environment (urban vs natural)
- Ecology protection / conservation values
- Open space that
 - is family oriented

- provides balance with high density housing
- supports lifestyle (eg recreation, pets, exercise, picnics etc)
- pedestrian safety
- safety from crime
- perceptions of safety are a key value.

In terms of the sort of place the community identified they would like Willoughby to be, it is considered that Beauchamp Park can contribute to the top five of the six most frequently identified options (p.13), namely:

- reasonably well serviced by public transport
- a family friendly place
- an environmentally friendly, ecologically minded place
- an area with a range of services and facilities
- a well planned and pleasant urban area

In terms of the vision and overarching principles of the City Strategy (p.17), it is considered that Beauchamp Park can contribute substantially to all the outcomes identified for the categories:

- Community and Cultural Life;
- Natural Environment; and
- Access and Infrastructure.

The park can contribute to some of the outcomes identified for the categories, such as:

- Our Homes (eg Neighbourhood Character); and
- Economic Activity, Creativity and Learning (eg Creativity and Learning).

2.2. Site Analysis

2.2.1. Ecology

Climate

Beauchamp Park is located within the Sydney Basin Bioregion (Figure 7) which has a temperate climate with significant variations in climatic elements (Bureau of Meteorology, 1991). The Willoughby Municipality experiences a subtropical coastal climate with hot humid summers and mild winters (Willoughby Fact Sheet No. 21, 2003).



Figure 7: Beauchamp Park (circled) is located within the Sydney Bioregion.

Analysis of the climate data (see Appendix B) shows that, in Willoughby:

1. Spring and autumn are the wettest seasons.
2. Hot days in spring, summer and autumn are usually ameliorated by pleasant afternoon sea breezes or southerlies.
3. The coldest winds in autumn, winter and spring come from the NW, W and SW
4. Winter is the driest time of year and the season when all winds are unpleasant.

It is important to note however that climate change predictions are that Sydney will get hotter and drier.

Microclimate of Beauchamp Park

The park is set on the side of a hill just below the main ridgeline that runs NE-SW (defined by the Pacific Highway). Thus the park is relatively protected from hot W and NW winds in summer and from cold W and NW winds in winter, spring and autumn. The elevated oval area is open to cool afternoon sea breezes from the NE and S in summer.

The upper part of Beauchamp Park, which contains the oval, pavilion and basketball court, is open and sunny in contrast to the lower section of the park, which is shaded by large trees and has a number of planted garden beds, making it cooler, moister and more sheltered.

The elevation and lack of shade trees to the W, S and SE of the oval means that this area is hotter and less comfortable for users and spectators in the summer months than the rest of the park.

Geology

The geology underlying Beauchamp Park is Ashfield Shale of the Wianamatta Group (Rwa), a black to dark-grey shale and laminite which overlays Hawkesbury Sandstone in the higher areas of Sydney (Geological Survey of NSW, 1983) (Figure 8). Wianamatta Shale landscapes are characterised by gently rolling topography and more fertile clay soils than those produced by Hawkesbury Sandstone (Chapman and Murphy, 1989).

Hydrology and Water

Natural Drainage

Willoughby LGA is located within the Sydney Harbour catchment portion of the Sydney catchment (Figure 9) and contains several small sub-catchments. Beauchamp Park is situated in the upper part of the Scotts Creek sub-catchment (Figure 10). The park drains to the corner of Nicholson and Darling Streets, east behind the houses along Nicholson Street in a concrete lined channel to Muston Park, then along Scotts Creek to Castle Cove, Sugarloaf Bay and finally to Middle Harbour, the northern arm of Sydney Harbour (Figure 11).

Stormwater and Sewerage

The present stormwater and sewerage system for the park and surrounds is shown in Figure 12.

Flooding

Local flooding occurs on rare occasions in the lower section of park near the corner of Nicholson and Darling Streets (pers. comm. Sue Stanford, WCC, 13/12/2006).

Groundwater

No groundwater maps were available from Willoughby City Council, the Department of Natural Resources (DIPNR) or the Sydney Catchment Authority.

The closest bore holes to Beauchamp Park are located southwest of the park at Chatswood Park (completed 1967); southeast of the park on the corner of McLelland and High Streets (completed 1966) and north of the park at Roseville Golf Course (completed 1994). Individual bore hole data obtained from the groundwater map of the NSW Natural Resources Atlas, Department of Natural Resources website (<http://www.nratlas.nsw.gov.au/wmc/savedapps/nratlas>) indicates groundwater was found at depths of 21.60m, 64.00m and 150.00m respectively.

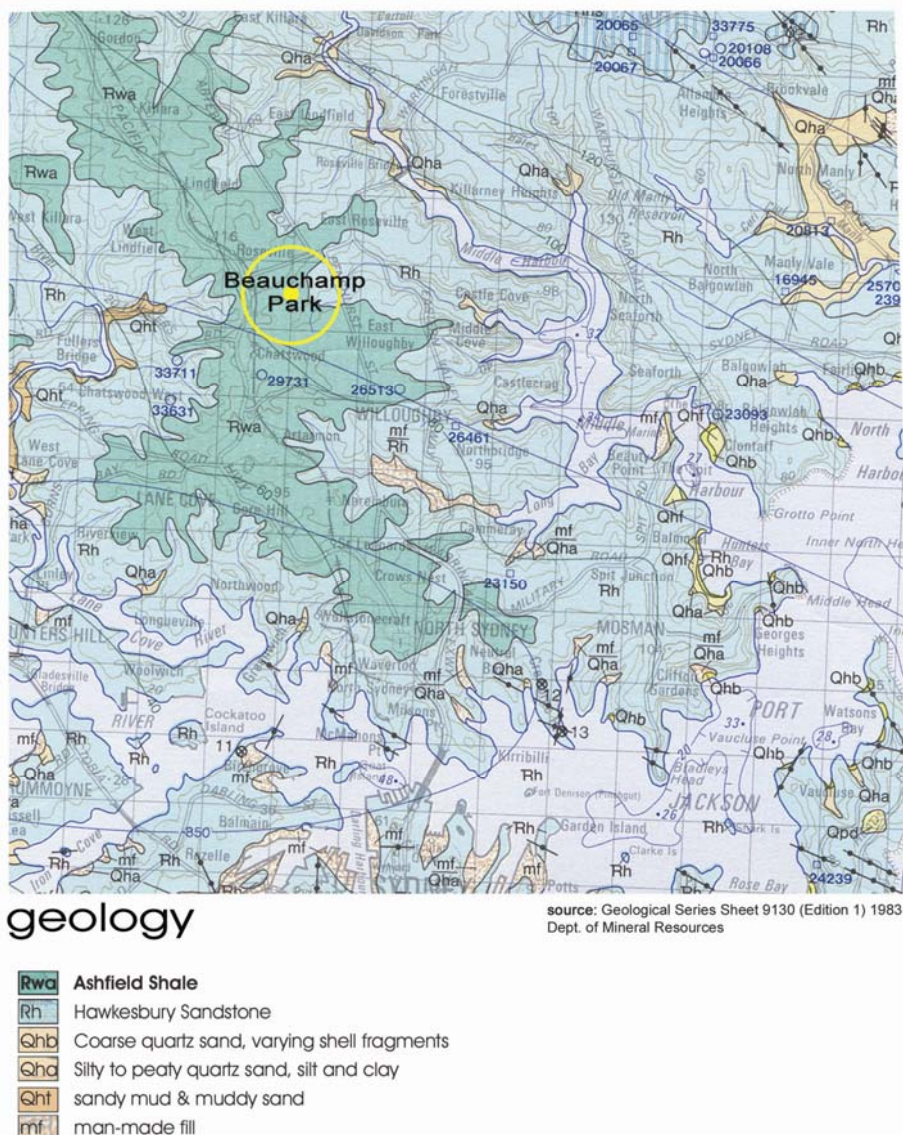
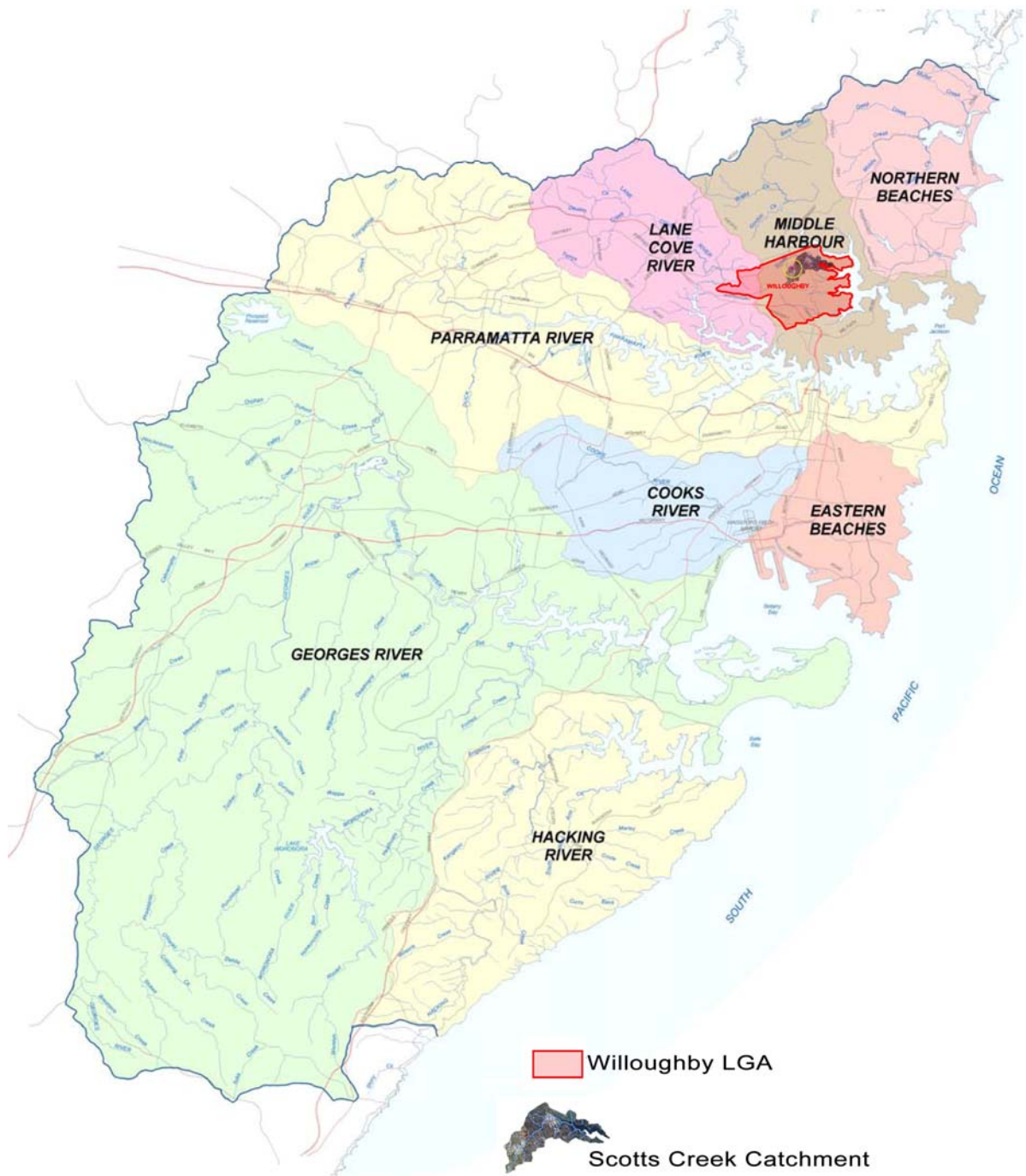


Figure 8: Geological map showing Beauchamp Park located within the Ashfield Shale cap overlaying the Hawkesbury Sandstone in the higher areas of northern Sydney.



sydney catchment

sourced: Catchment Management Authority 2007 - www.sydney.cma.nsw.gov.au

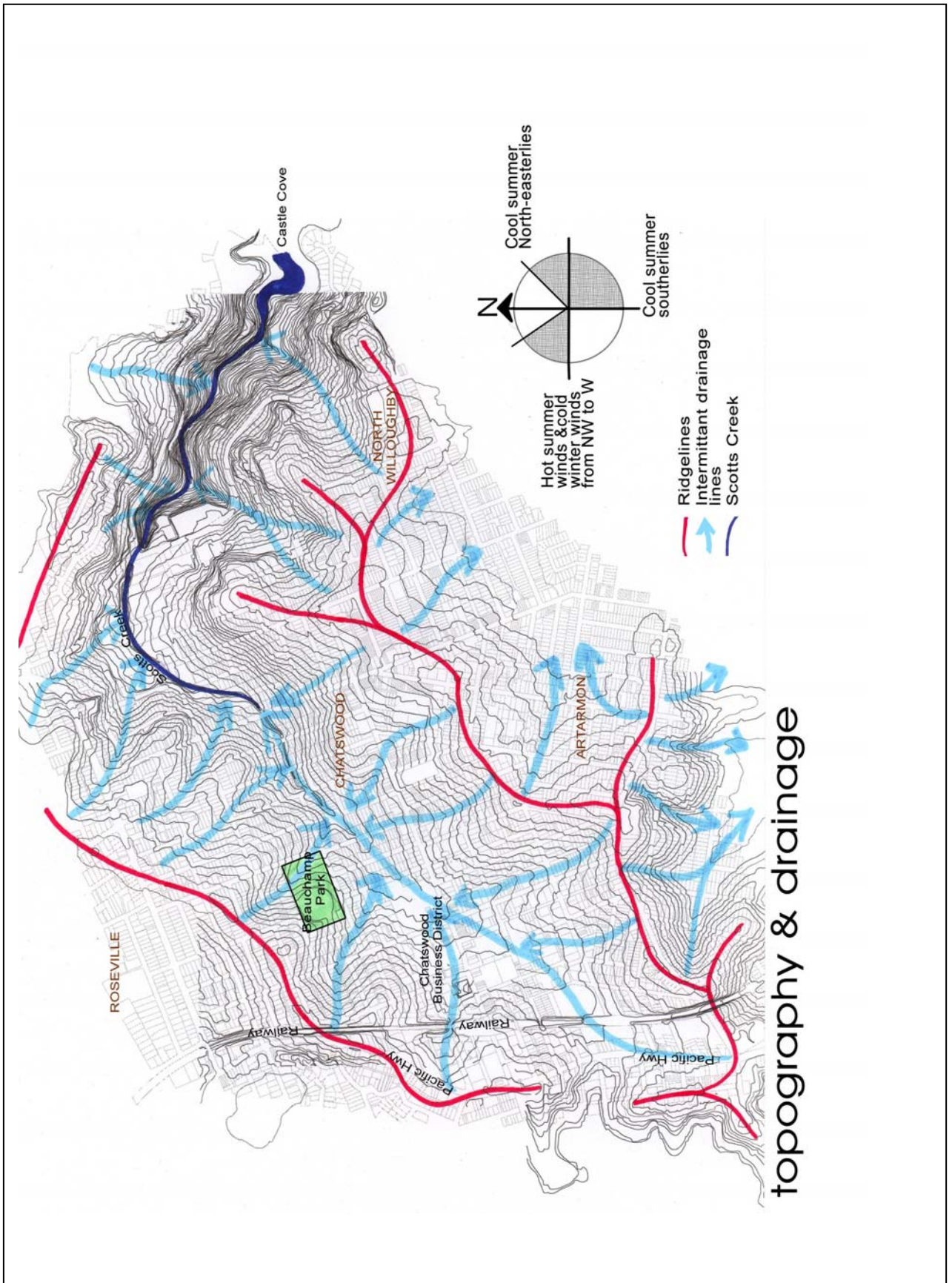
Figure 9: Map of the Sydney catchment in which Willoughby, including Scotts Creek sub-catchment, is situated.



scotts creek catchment

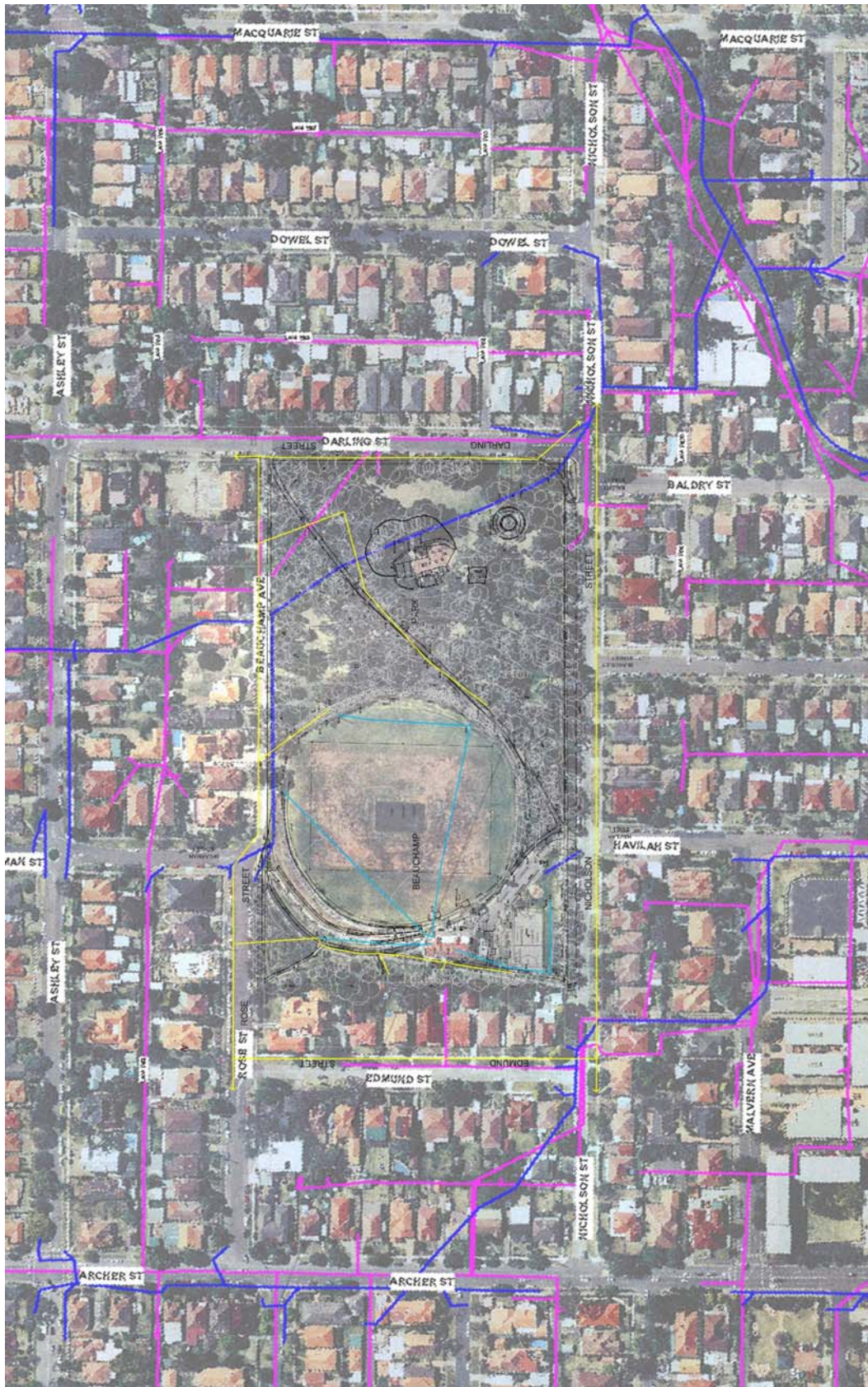
source: Willoughby City Council

Figure 10: Aerial photograph showing Beauchamp Park (circled) within the Scotts Creek sub-catchment of Sydney catchment.



topography & drainage

Figure 11: Analysis of the topography showing the drainage context of Beauchamp Park.



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Above ground power lines (Surrounding Site)
 Underground power lines
 Sewer
 Stormwater

services

Figure 12: Plan showing the sewer and stormwater system servicing Beauchamp Park. Power services are also shown.

Irrigation

Irrigation of the oval and elsewhere in the park is currently provided from the mains water supply. Water supply is determined by current water restrictions – Monday only between 1am-4am, 6am-9am and 5pm-8pm. Each watering cycle uses 45,000 litres with an approximate weekly total of 100,000 litres now being used. Under optimum conditions the oval would be watered three times per week in spring and summer between 10pm and 6am with a usage of 300,000 litres or three times the current amount (pers. comm. David Puckeridge, WCC, 12/12/06).

The garden beds in the lower section of the park are planted mainly with exotic species such as Azaleas and Camellias which require regular watering. In the past the garden beds have been irrigated using standpipes or a pop-up system. Recent water restrictions however have meant that only hand watering is permissible on Mondays (pers. comm. Adam Cole, Parks Manager, WCC, 21/11/06). This has contributed to a drop in vigour and health of the plants in the garden beds, a matter raised by a number of people during the community consultation process. A number of residents felt that water harvesting and storage for irrigation purposes would alleviate this problem. Suggestions by BioDesign that the number of beds be reduced and that some of the understorey species be replaced by more drought tolerant species were also met with general approval.

Elevation and Slopes

Beauchamp Park is located between 80 and 100 m above mean sea level on what was once the head of Scotts Creek. The park slopes gently to the east (Figure 13). By analysing the current contours it is possible to determine that the original slope across the park would probably have been between 1 in 10 (10%) to 1 in 20 (5%) but cutting and filling in 1927-1928 in the upper part of the site to form the oval created steep embankments around its edge. The cut bank to the SW of the oval is likely to have very shallow soils while the fill bank below the oval will have deep soil with a mixed profile. The presence of large remnant trees and lush growth in the lower part of the park indicates that the original contours here have been little changed and that the soils are both deep and moist.

Soils

Beauchamp Park is mapped under the Glenorie (gn) soil landscape (Figure 14) which once supported tall open forest (wet sclerophyll forest) with dominant trees species that included Sydney Blue Gum (*Eucalyptus saligna*) and Blackbutt (*Eucalyptus pilularis*) (Chapman and Murphy, 1989). The Glenorie soil landscape consists of Wianamatta Shale occurring in a 'developed terrain' and this is the case at this site. The original soils in the upper part of Beauchamp Park have been significantly altered by the cutting and filling of the oval in the late 1920s (Figure 15).

Salinity

Urban salinity is a serious problem in western Sydney on the Wianamatta shale soils, which are inherently saline. Mapping of western Sydney salinity has been conducted but it does not include the Wianamatta shale-derived soils of the North Shore. Urban salinity has not been identified as a problem in this area.

Potential Acid Sulfate Soils (PASS)

PASS typically occur in low-lying areas where estuarine environments exist or previously existed. However Planning NSW identifies most of the Willoughby City Council area, including Beauchamp Park, as having Class 4 acid sulfate soils. This means that any work beyond 2 metre below the natural ground surface and works by which the water table is likely to be lowered beyond 2 metres below the natural surface has potential to mobilise acid sulfate soils (<http://iplan.australia.net.au>).

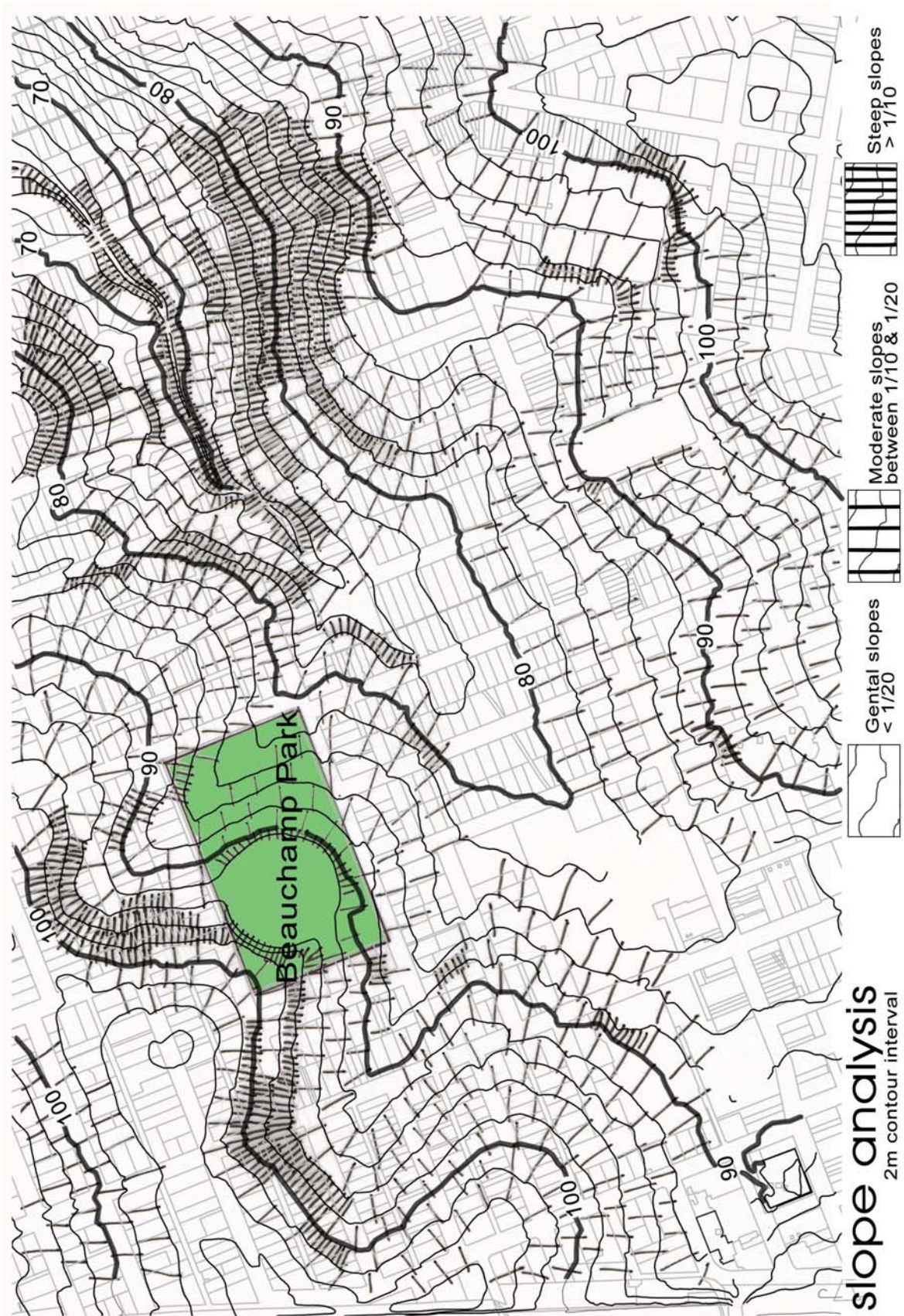
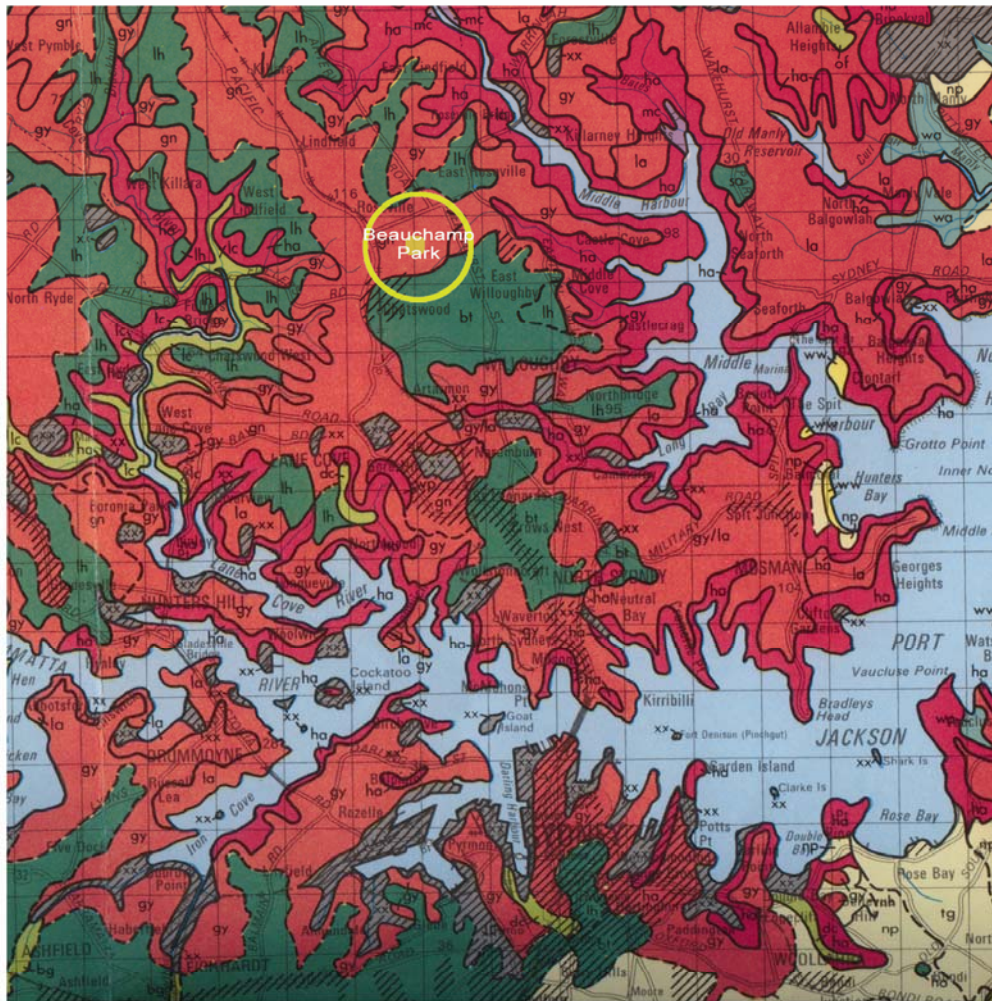


Figure 13: Analysis of the slopes within and around Beauchamp Park. The level oval area is clearly discernible.



soil landscapes source: Chapman & Murphy (1989) Soil Landscapes of the Sydney 1:100 000 Sheet. Soil Conservation Service of NSW

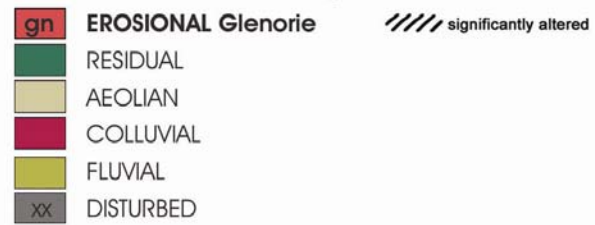


Figure 14: Extract of the Sydney Soil Landscapes 1: 100 000 sheet showing Beauchamp Park located within a Glenorie soil landscape.

Contamination

The site was used as a farm and slaughter yard from 1864 to 1896 before becoming a park in 1899 (see Timeline in Section 3.2.1). No evidence of dumping or other forms of contamination was found in the historical records for the site. No contamination tests were carried out as part of this study and as far as could be determined none have been done in the past.

Erosion

Beauchamp Park is generally well covered with grass and trees. Minor erosion occurs where a path has been worn on the embankment between the gate on the eastern side of the oval and the playground below (Figure 15).

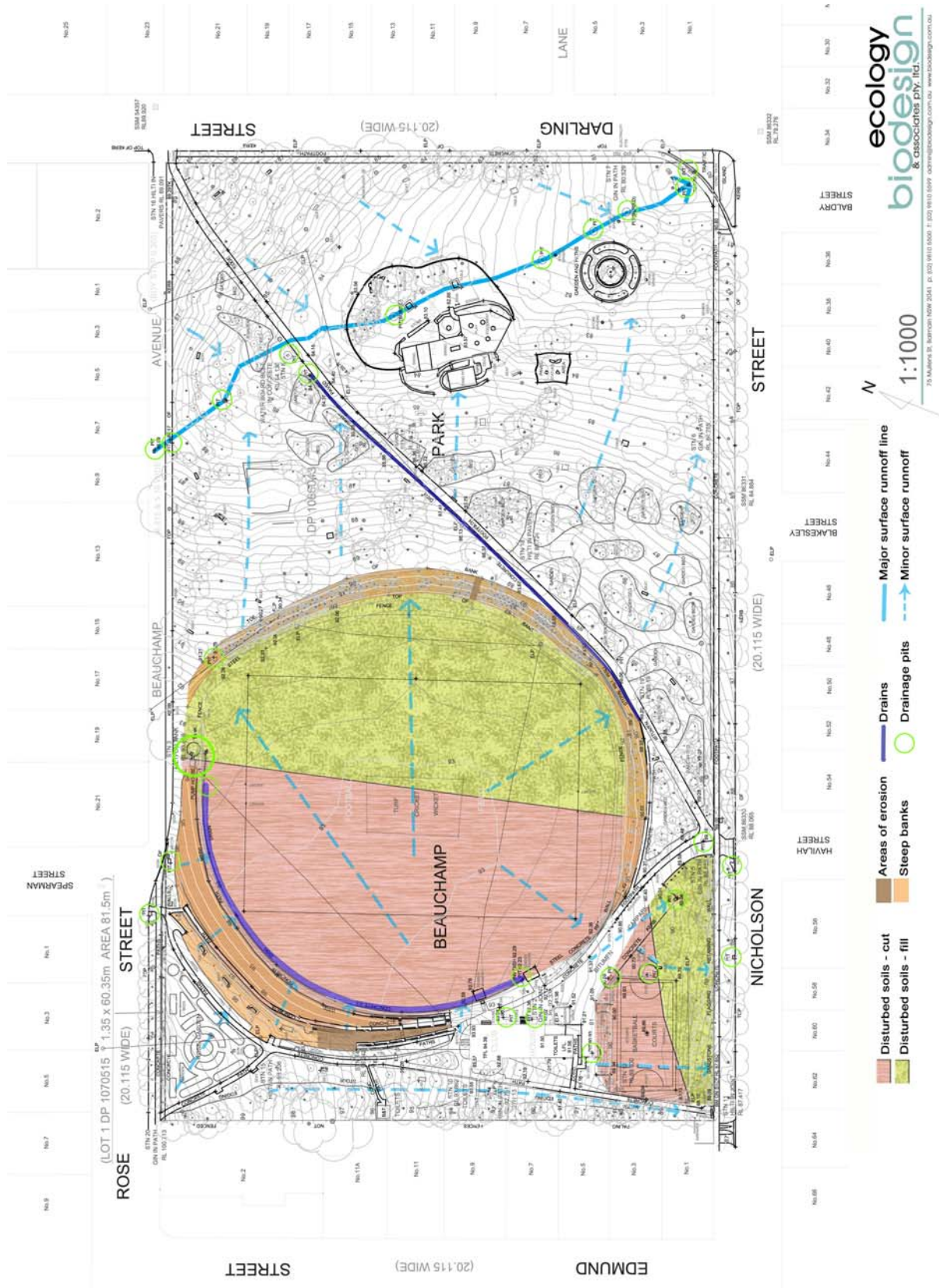


Figure 15: Analysis of soil and drainage conditions of Beauchamp Park.

Vegetation and Trees

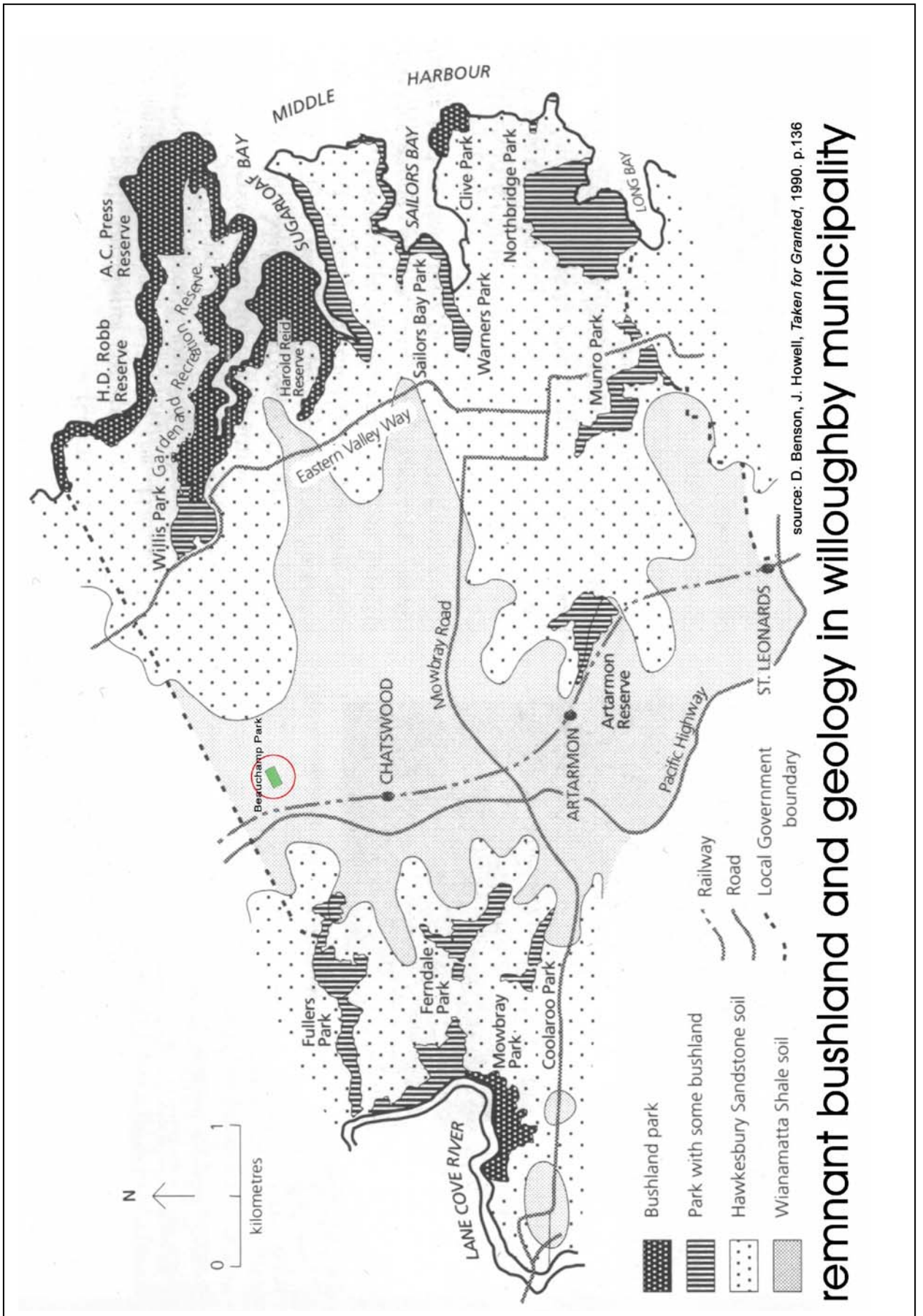
The higher parts of Willoughby, including Chatswood, were once covered by Blue Gum High Forest, with tall trees of Blackbutt (*Eucalyptus pilularis*) as the dominant species and Sydney Blue Gum (*E. saligna*) as co-dominant species. These were cut down by the early timber getters and settlers (Benson and Howell, 1990, p134). A number of original trees remain in the lower half of Beauchamp Park, including Turpentine (*Syncarpia glomulifera*), Blackbutt (*E. pilularis*), White Stringybark (*E. globoidea*), Red Mahogany (*E. resinifera*), Ironbark (*E. paniculata*) and Sydney Red Gum (*Angophora costata*) (see Part 3 - Tree Issues Report).

Blue Gum High Forest vegetation is listed under the NSW Threatened Species Act (1995) as an endangered ecological community. (NPWS, 1997). About 1% of the original area of the community currently exists in the form of a number of remnants and the Scientific Committee considers it likely to become extinct unless threats to its survival are eliminated. Threats include “fragmentation, developments, increased nutrient status, inappropriate fire regimes, invasion by exotic plants, mowing and clearing”. On this site, these threats are all present.

The remnant vegetation of Beauchamp Park is not, however, mapped as a significant vegetation community in the Willoughby Council area (Figures 16 and 17). Beauchamp Park is also not mapped as either an existing or a potential vegetation corridor on the Sydney Green Web (Figure 18).

Trees

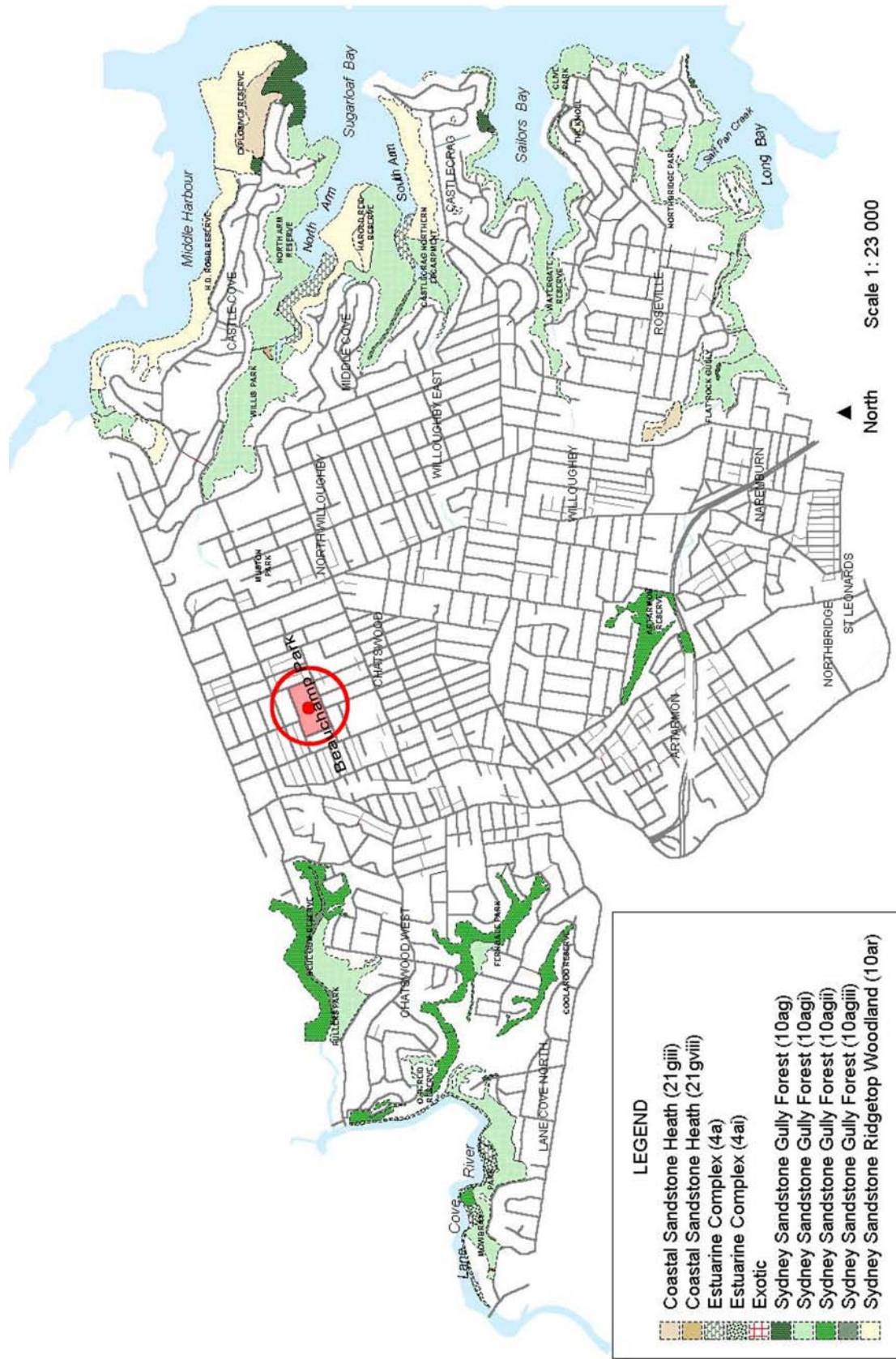
Refer to Part 3 – Tree Issues Report



source: D. Benson, J. Howell, Taken for Granted, 1990, p.136

remnant bushland and geology in willoughby municipality

Figure 16: Location of Beauchamp Park (circled) in an area of Wianamatta shale soils that have been substantially cleared of their original vegetation.



remnant vegetation communities

Source: Willoughby City Council <http://www.willoughby.nsw.gov.au/Environment.html>

Figure 17: Remnant vegetation that has been mapped in Willoughby. The remnant vegetation in Beauchamp Park (circled) is not mapped.

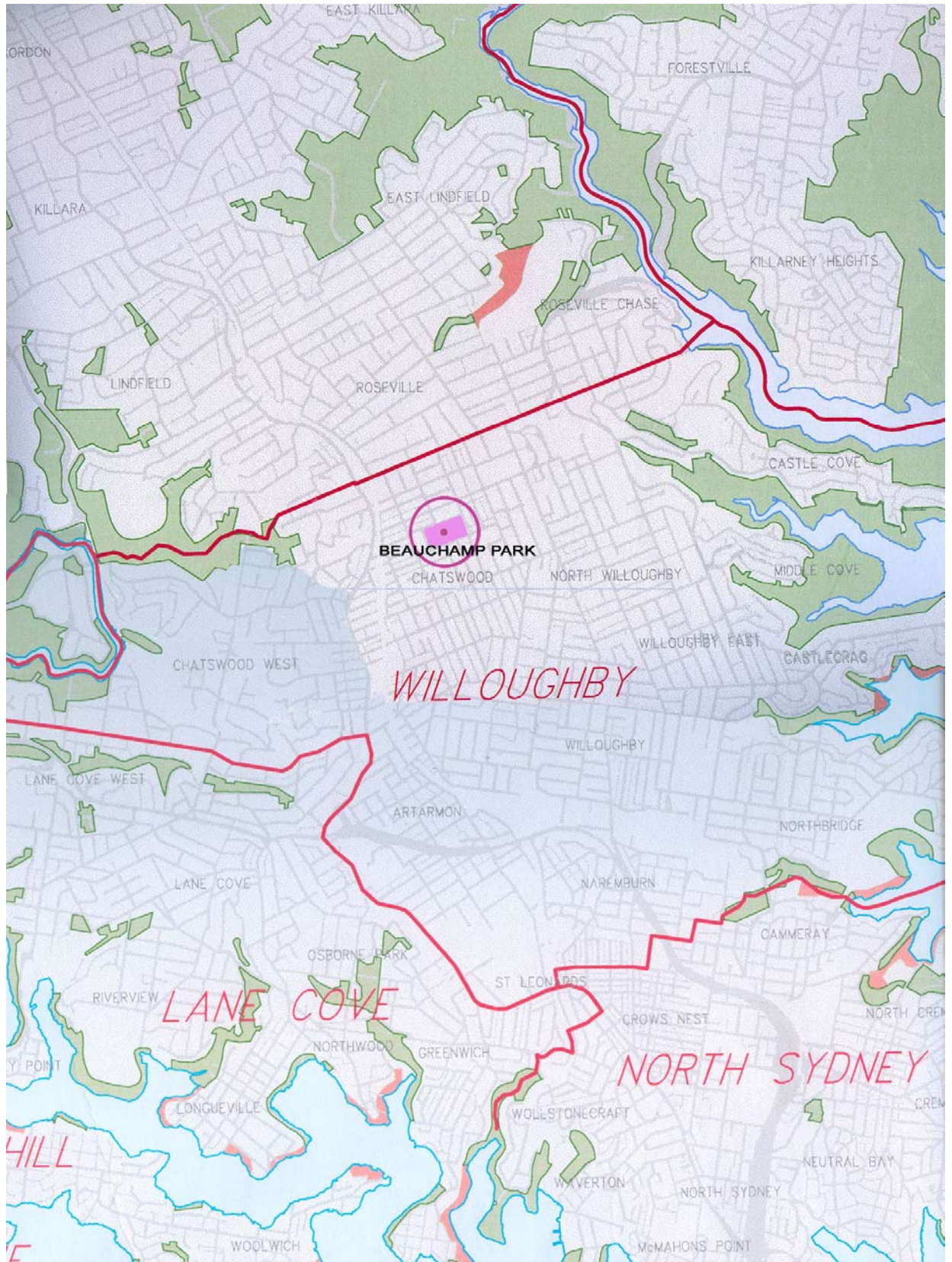


Figure 18: The relationship of Beauchamp Park (circled) to the Sydney GreenWeb mapping. The park is not mapped as part of any existing or potential 'green' corridors.

Fauna

No fauna surveys were carried out as part of this research. However, Simon Brown, Wildlife Officer at WCC (pers.comm. 8/12/06) provided a list of sightings of fauna at Beauchamp Park (Table 2.1).

TABLE 2.1: FAUNA SIGHTED AT BEAUCHAMP PARK

Mammal Species

Brushtail Possum	<i>Trichosurus vulpecular</i> # WW DB
Ring Tailed Possum	<i>Pseudocheirus perigrinus</i> # WW DB
Grey-headed Flying Fox	<i>Pteropus poliocephalus</i> # WW DB

Reptile Species

Eastern Water Skink	<i>Sphenomorphis quoyii</i> # WW DB
Garden Skink	<i>Lampropholis guichenoti</i> # WW DB
Eastern Blue-tongue Lizard	<i>Tiliqua scinooides</i> # WW DB

Bird Species

White Faced Heron	# AB 2004
Masked Lapwing	# AB 2004
*Rock Dove	# AB 2004
*Spotted Turtle-Dove	# AB 2004
Crested Pigeon	# AB 2004
Yellow-tailed Black Cockatoo	# WW DB
Sulphur-crested Cockatoo	# AB 2004
Rainbow Lorikeet	# AB 2004
Musk Lorikeet	# AB 2004
Australian King Parrot	# WW DB
Crimson Rosella	# AB 2004
Eastern Rosella	# AB 2004
Powerful Owl	# WW DB
Southern Boobook	# WW DB
Tawny Frogmouth	# WW DB
Laughing Kookaburra	# AB 2004
Noisy Minor	# AB 2004
Grey Butcherbird	# AB 2004
Australian Magpie	# AB 2004
Pied Currawong	# AB 2004
White-winged Chough	# AB 2004
Dusky Woodswallow	# AB 2004
Silvereye	# AB 2004

AB 2004

WW DB

*

Birds of Willoughby by Andy Burton 2004

WCC Wildlife Watch Database

Non Native

2.2.2. Community

Cultural History

Aboriginal History

The North Shore of Sydney, including the Willoughby area, was inhabited by two main sub-tribes of the Eora people, the Cammeraygal and Wallumedegal. The Cammeraygals were recorded by the first Europeans as being the most numerous and powerful. There is evidence that the Cammeraygals were living in the area until 1820 but disease, displacement and massacres meant that by the 1860's Aborigines were only occasional visitors to the North Shore area (Willoughby City Library, 2002).

Allan Madden of the Metropolitan Land Council has visited Beauchamp Park and advised that it does not contain any registered aboriginal sites of significance.

European History

The timeline in Table 2 gives a detailed history of European occupation of Beauchamp Park since the early 1800s. Figures 19-22 illustrate the changes in ownership and subdivision over time as described in the Timeline.

Table 2.2: BEAUCHAMP PARK TIMELINE

1800's

- 1825 600 acre parcel of land where Beauchamp Park stands is first granted to Richard Archbold but reverts back to the Crown after an argument between Archbold and his neighbour about its northern boundary (NTSLIB c2000)
- 1850 The land is sold to John Stirling, Chairman of the Bank of Australia then to William Lithgow, a shareholder in the bank (NTSLIB c2000)
- 1854 Lithgow subdivides the land and advertises 400 acres an auction in the S.M.H. His plan for "The Township of North Sydney" does not eventuate but he sells the lots off over the next ten years.
- 1863 Joseph Hammond migrates from Suffolk England and sets up a butcher shop in North Sydney, the first on the North Shore (Pillinger c1986)
- 1864 Hammond acquires (rents?) the land where Beauchamp Park now stands for a farm. He clears the heavily wooded site and tills it for crops, builds a dam and family home (Pillinger c1986)
- 1865 Municipality of North Willoughby established
- 1867 Hammond marries Emily Northropp – they raise 12 children on the property. At that time only ten other families in the area. Hammond begins to sell meat in the Chatswood district from a 'cutting cart' and sets up a slaughter yard for cattle and sheep (and boiling-down works?) on what is now Beauchamp Park (Pillinger c1986)
- 1868 Hammond opens a very successful butcher's shop on the corner of Gordon Road (now Pacific Highway) and Moriarty Road (Pillinger c1986)
- 1872 First record of the site of Beauchamp Park in Council rate book, approximately 15 acres owned by William Sparkes but rented to Joseph Hammond (Sparkes ran a hay and corn store on Milsons Point Road not far from Hammond's butcher shop (NTSLIB c2000)

- 1880s A decade of vigorous land subdivision in Chatswood (WDCP 2006, Section H.3(1))
- 1882 Council records show that Hammond now owns the 15 acre site (Note that Leplastrier states (p.84) that Hammond purchased the property in 1868 for £5 per acre) (NTSLIB c2000)
- 1883 Council records show that the property is owned by Richard Sheldon with 2 acres having been given over for the construction of a road. (Leplastrier 1988)
- 1886 The Land Company of Australia buys the 13 acre site
- 1890 Arrival of the railway in Chatswood is followed by high class building activity in the close vicinity of the station (WDCP 2006, Section H.3(1))
- 1896 The Hammond family move to 40 acres in West Pymble and transferred the slaughter yard there (the firm of Joseph Hammond, later Hammond Brothers, served the area as butchers for 105 years) (Pillinger c1986)
- 1897 Land Company of Australia is in financial difficulties and government inspects the site
- 1899 The Government purchases the property with the intention of creating a park using funds from the sale of contested Crown Land removed from the Reserve for Recreation at Gore Hill (NTSLIB c2000, Leplastrier 1988)
- 1899 October 25, Beauchamp Park proclaimed, 4.5324 ha (11 acres, 0 roods and 32 perches). It is named after William Lygon, seventh Earl Beauchamp, Governor of NSW (1899-1901) although originally Council moved that it be named 'Koiyong Park' (NTSLIB c2000)

1900's

After

- 1914 A further wave of subdivisions and building of grand Federation homes on large allotments in North Chatswood (WDCP 2006, Section H.3(1))
- 1926 Mr H.W. Gooding submits Gardener's Report for Beauchamp Park describing the clearing and planting of Flowering Gums along Beauchamp Avenue and recommending drainage and planting works in the lower SE corner of the park (near Baldry Street). He suggests a new fence be built around the embankment of the oval to replace an old one while excavations are being carried out. (WCL- LHC)
- 1926 The Scarness Estate (now the surrounds of Ashley House) is subdivided and auctioned. (WCL- LHC)
- 1927 The grandstand (first section of the pavilion) is erected (cost £851) (NTSLIB c2000)
- 1928 Engineer's Department reports that during 1927 Beauchamp Park "was transformed from a small playing ground into a good first class ground". Work still outstanding – completion of turfing, terracing, fence and pipes to drain plus repayment of pavilion costs, and £2150) (WCL- LHC)
- 1952 Rex Hazlewood, Garden and Landscape Design, engaged by Council, submits report suggesting tree plantings and improvements in a number of parks in Willoughby. Beauchamp Park is mentioned but no specific notes are on file. The large number of Spotted Gums that now exist in the lower section of Beauchamp Park are almost certainly his handiwork from this period. (WCL- LHC)
- 1954 Wire fence around the oval needs renewing and repairs needed to the pavilion. (WCL- LHC)

- 1965 The pavilion is almost doubled in size and a hall, gym and showers added, to commemorate the centenary of the Municipality. The pavilion is used by the Chatswood Junior Rugby Union Football Club, as a youth centre and by women's athletic groups. An "International Grove" with fountain and 11 flagpoles is installed at the corner of Nicholson and Darling Streets by WCC and the Chatswood Jaycees., the flags representing the many new immigrants in the Willoughby area – these are later removed because of repeated vandalism (NTSLIB c2000, WCL– LHC)
- 1975 The Reg McMahon Garden is named (after Willoughby's Superintendent of Parks and Gardens) and a sundial is dedicated in the existing rose garden. (WCL– LHC)
- 1976 A resident praises Council in the North Shore Times for painting the central path in the lower section bright red – he suggests luminous red paint next time for an even bigger effect! (WCL– LHC)
- 1979 A temporary skateboard facility installed in the park is very well used (WCL– LHC)
- 1980 Photo of pavilion and oval shows hedge all the way along the back of park and a white chainwire fence approx. 900mm high around the oval. The same fence is still there in a 1991 photo (WCL– LHC)
- 1982 The National Trust of Australia (NSW) classifies the Urban Conservation Area of North Chatswood describing Beauchamp Park as the "square" which is the focus of the townscape (WDCP 2006, Section H.3(1))
- 1986 Attempts by the East Ward Progress Association to rename Beauchamp Park Hammond Park in honour of Joseph Hammond fail (NTSLIB c2000)
- 1986 Photo of playground shows log style equipment, old benches and asphalt path with brick edge (WCL-LHC).
- 1992 Council reports a petition from the Beauchamp Park Action Group calling to re-establish grass in the lower sections of the park (WCL– LHC)
- 1993 Photos show playground with colourful steel and plastic equipment added to log structures, the white mesh fence still around oval, no planting to bank below oval and the basketball court with backboard. The conifers to Nicholson Street (near the parking area) look about 2-2.5m high (WCL– LHC)
- 1994 Carols by Candlelight held in the park for Christmas (WCL-LHC).
- 1995 Council proposes to remove 21 conifers, planted 20 years previously, from the western border of the park (WCL– LHC)
- 1997 Plan of management for Chatswood Parks Central Business District is adopted (April 1997) (WCL– LHC) identifying
- 1997 Plan of Management by Lanscope Pty Ltd for the Chatswood East Ward Parks which includes Beauchamp Park is adopted (July 1997) (WCL– LHC)
- 1999 Centenary of Beauchamp Park celebrated with on National Family Day and officially commemorated by the opening of the new playground equipment (NTSLIB c2000)

2000's

- 2003 Artistic "nest boxes" are installed in trees in the playground (WCL– LHC)
- 2004 Used syringes are reported in the paper as being found in the playground sandpit (WCL-LHC).
- ? New toilets are built on the southern end of the pavilion

TIMELINE REFERENCES

Egan, Vince, 1988, *The Heritage of East Chatswood*, The Bicentennial Committee of WCC.

Lepastrier, Claude, 1988 facsimile edition, *Willoughby's Fifty Years A Retrospect of the Jubilee period of the Council of the Municipality of Willoughby for the years 1865-1915*, Willoughby City Council

NTSLIB, c2000, \\NTSLIB\COMM\LIBRARY\LOCHIST\Beauchamp Park.Doc

Including references: Forsyth, Leslie Charles, *The Township of North Sydney Sands Directory 1870-1874*
Willoughby Municipal Council Rate Books 1872-1899


Pillinger, E. May, c1986, "Beauchamp Park...Should it be Hammond Park?" Parks and Reserves - Beauchamp Park 1980s, vertical file, Willoughby City Library – Local History Collection

WCL– LHC, Willoughby City Library – Local History Collection (Vertical Files, Parks and Reserves: Before 1950s, 1960s, 1970s, 1980s and Photo Files: Beauchamp Park)

WDCP 2006, Willoughby Development Control Plan, Part H 3(1) C - Heritage Items and Conservation Areas, North Chatswood, WCC



historical map 1815


 Future Location of Beauchamp Park

source: NSW Department of Lands http://www.lands.nsw.gov.au/survey_mapping/parish_maps

Figure19: Map of the Willoughby area in 1815 with the future land grant that now encompasses Beauchamp Park superimposed on it.



historical map post 1815

 Future Location of Beauchamp Park

source: NSW Department of Lands http://www.lands.nsw.gov.au/survey_mapping/parish_maps

Figure 20: Historical Map of the locality where Beauchamp Park is now located showing the early land grants in the area (post 1815).

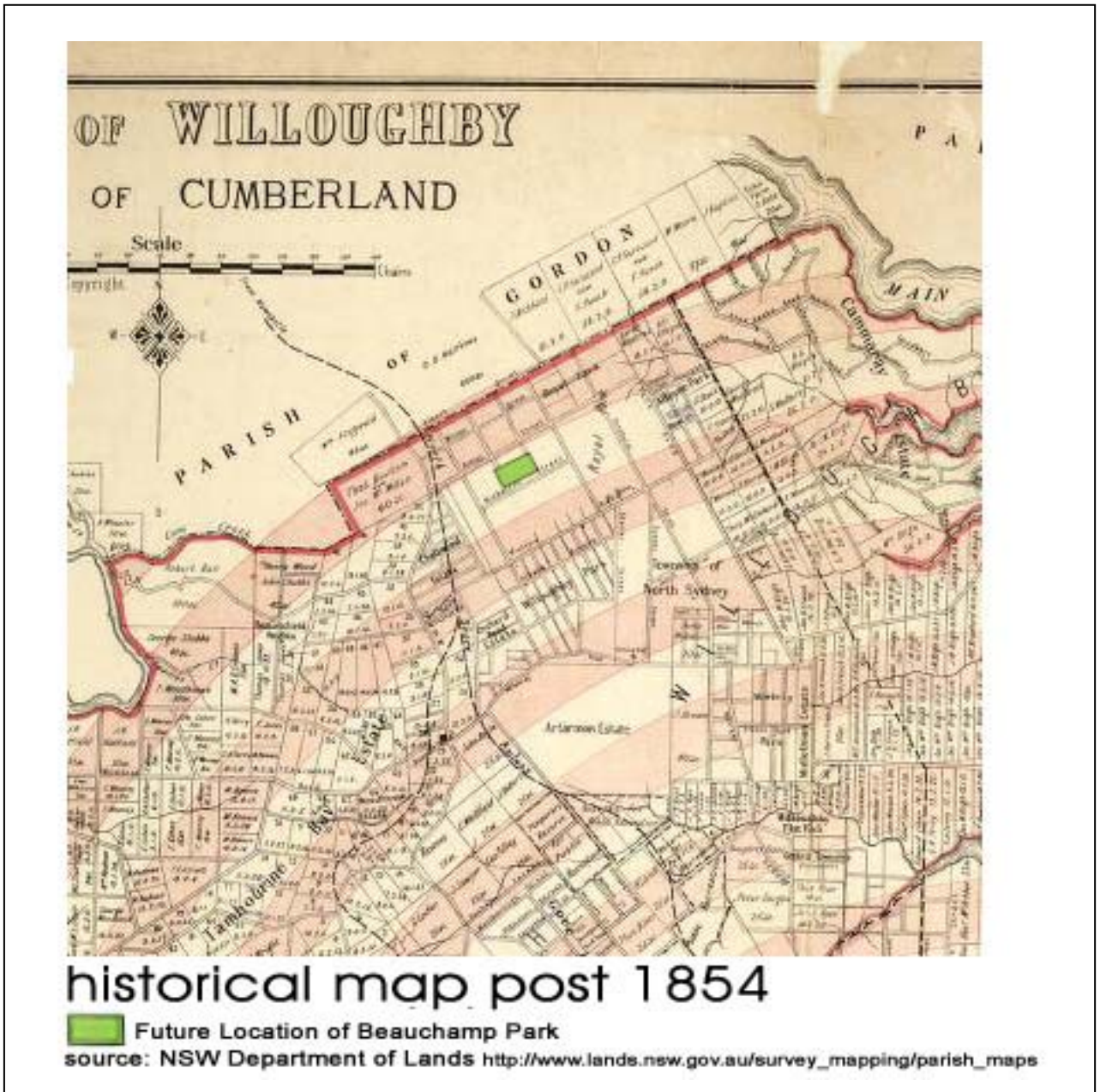


Figure 21: A historical map of the area now containing Beauchamp Park showing the post 1854 subdivision pattern.

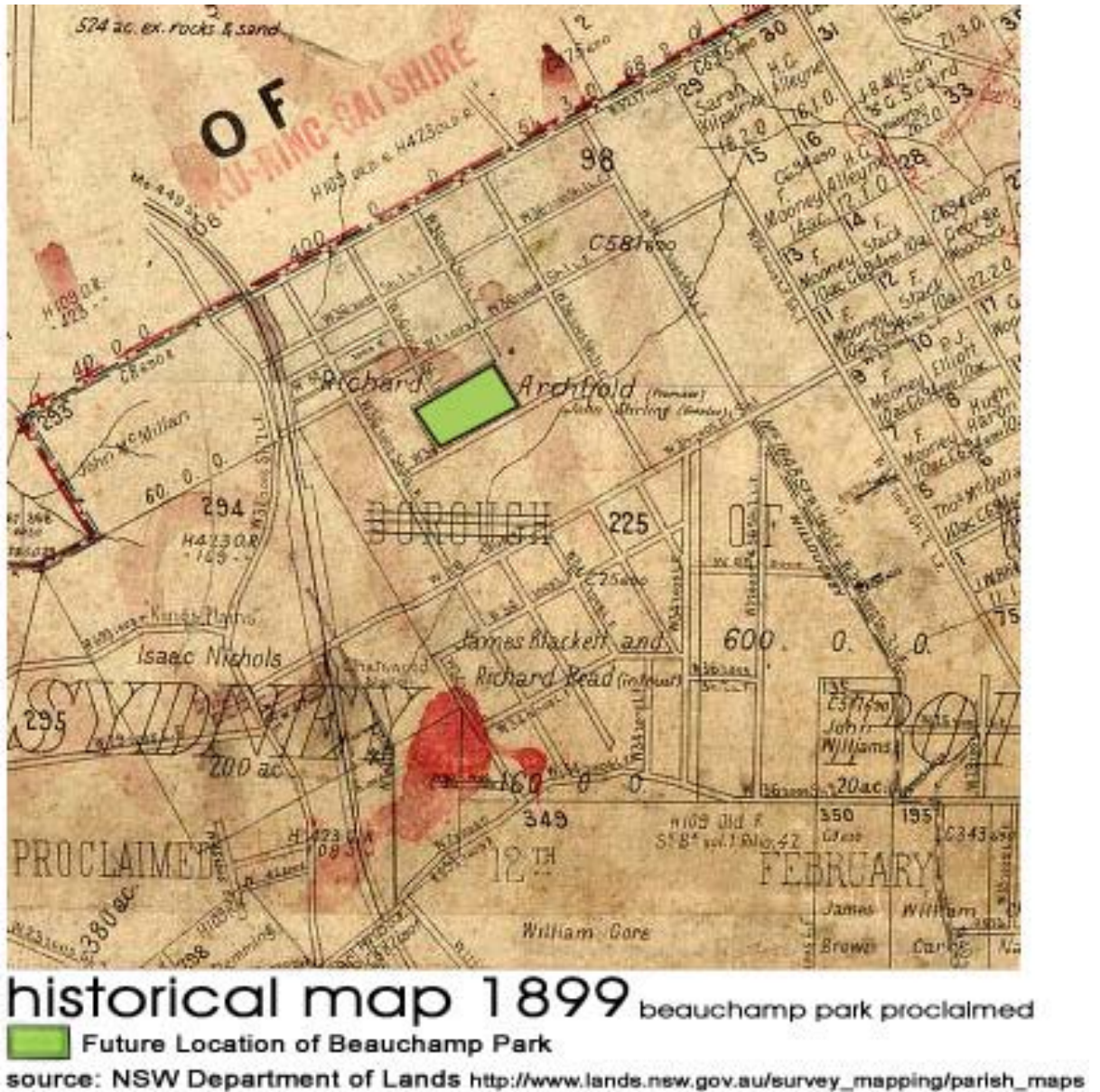


Figure 22: A historical map of the Beauchamp Park locality showing the sub-division pattern at the time when the park was proclaimed in 1899.

Heritage

As stated in Section 2.3.3 of the Willoughby Development Control Plan 2006, H.3(1) C - Heritage Conservation Areas, Locality 6 - Beauchamp Park is identified as a 'square' and focus of the North Chatswood Conservation Area (Figure 6).

Within the park itself there are no heritage items of state, regional or local significance listed for Beauchamp Park on the NSW State Heritage Register or WCC's LEP 1995. However the WDCP 2006 H.3(1) C states that "decorative sculpted metal exhaust vents are attractive remnants of original 'street furniture'" (p.H31). Two such vents were located in the park, one east of the playground on Darling Street and another south of the playground on Nicholson Street.

Public Transport

The closest train station to Beauchamp Park is Chatswood Station, approximately 10-15 minutes walk away.

There are no buses which directly access Beauchamp Park. The closest State Buses (L60, 136, 257, 267, 272, 273 and 275) run along Victoria Avenue while Forest Coachlines run the 277 service from Chatswood Station to Castle Cove along Ashley Street (one block to the north of the park) and Shorelink run the 558 service from Chatswood Station to Lindfield up Archer Street (Figure 23).

According to the consultation with user groups and residents carried out for this report there are no problems with public transport to and from the park.

Car Access and Parking

Car access to Beauchamp Park is possible from three sides of the park - Beauchamp Avenue and Rose Street, Darling Street and Nicholson Street (Figure 23). An off-street carpark for 16-18 cars is available near the pavilion and basketball court with access from Nicholson Street opposite Havilah Street. Currently the Gordon District Cricket Club and the Chatswood Club (Seniors and Juniors) require approximately 50 spaces, using all of the carpark plus overflow parking onto the street (see Community Consultation, p52). The other main users of the carpark are the basketball players who use the court at varying times of the day and night (note one resident complained about the basketballers playing loud music from their car stereo systems). The remaining users of the oval or pavilion need only a small number of parking spaces (see Community Consultation, p52).

On street parking is possible on all streets adjoining the park although in one small section of Darling Street, 2 hour time limits apply from 8.30am-6pm Monday to Friday to service the playground and in two sections of Beauchamp Avenue from 8.30am -6pm Monday to Saturday to service residents (Figure 24). It is important to note that the parking along Beauchamp Avenue lies within the actual park boundaries.

Parking is unlimited along the park side of Nicholson Street (no parking is allowed on the other side of Nicholson Street). It was noted that all unlimited parking spaces in the streets surrounding the park appear to be used for long stay parking from Mondays to Fridays by commuters and people working in the nearby business district. As no problems with on street parking were raised in the questionnaire (see Community Consultation, p52) by the cricket or football clubs who use the grounds on Saturdays, Sundays and in the evenings, it may be possible to increase the amount of open space within the park by removing the carpark altogether and accommodating all carparking needs along Nicholson Street. To achieve this, time limits would need to be implemented that suit the various park user groups. Removal of the carpark may also solve the problem of basketballers playing loud music from their cars.

Bicycle Access

The bicycle route which links the Chatswood Business District with Archbold Road and East Chatswood cuts diagonally across Beauchamp Park along the existing shared bicycle/pedestrian path (Figure 25). During the community consultation process no conflict with this dual use of the path was raised.

Pedestrian Access

Easy pedestrian access is possible from the three sides of the park which adjoin public roads (Figures 23 and 24). Houses along the western boundary prevent direct access from Edmund Street. As the park does not adjoin any main roads, the streets around the park are relatively quiet. No pedestrian crossings currently exist but a number of calming devices have been constructed in Beauchamp Avenue (5 no.), Darling Street (1 no.) and Nicholson Street (1 no.) which appear to

effectively control car speeds around the park. No complaints about road safety were made by residents or the user groups.

The existing paths which cut across the park follow the desire lines of pedestrians moving between outlying residential areas and the Chatswood Business District. The existing paths along the road frontages of Nicholson Street and Darling Street also appear to service pedestrians well (Figure 26). The only section of the park which does not have easy, all weather access is the area adjacent to Beauchamp Avenue. The need for a path here was raised during the community consultation process.

Disabled Access

Disabled access is possible in most areas of the park except from:

- the entrance near the corner of Nicholson and Edmund Streets where two steps exist;
- from the intersection of Rose and Spearman Streets to the oval embankment where two steps exist; and
- along Beauchamp Avenue where there is no path.

The new toilets have good disabled access but the pavilion itself is not accessible except via the existing ramp on the northern end of the pavilion which is usually kept locked. The path surface between Rose Street and Nicholson Street on the western edge of the park is uneven and lifting in places. Some alterations and improvements are needed in the park in order to meet Australian Standards and Willoughby Council's DCP 14 – *Access, Mobility and Adaptability*.

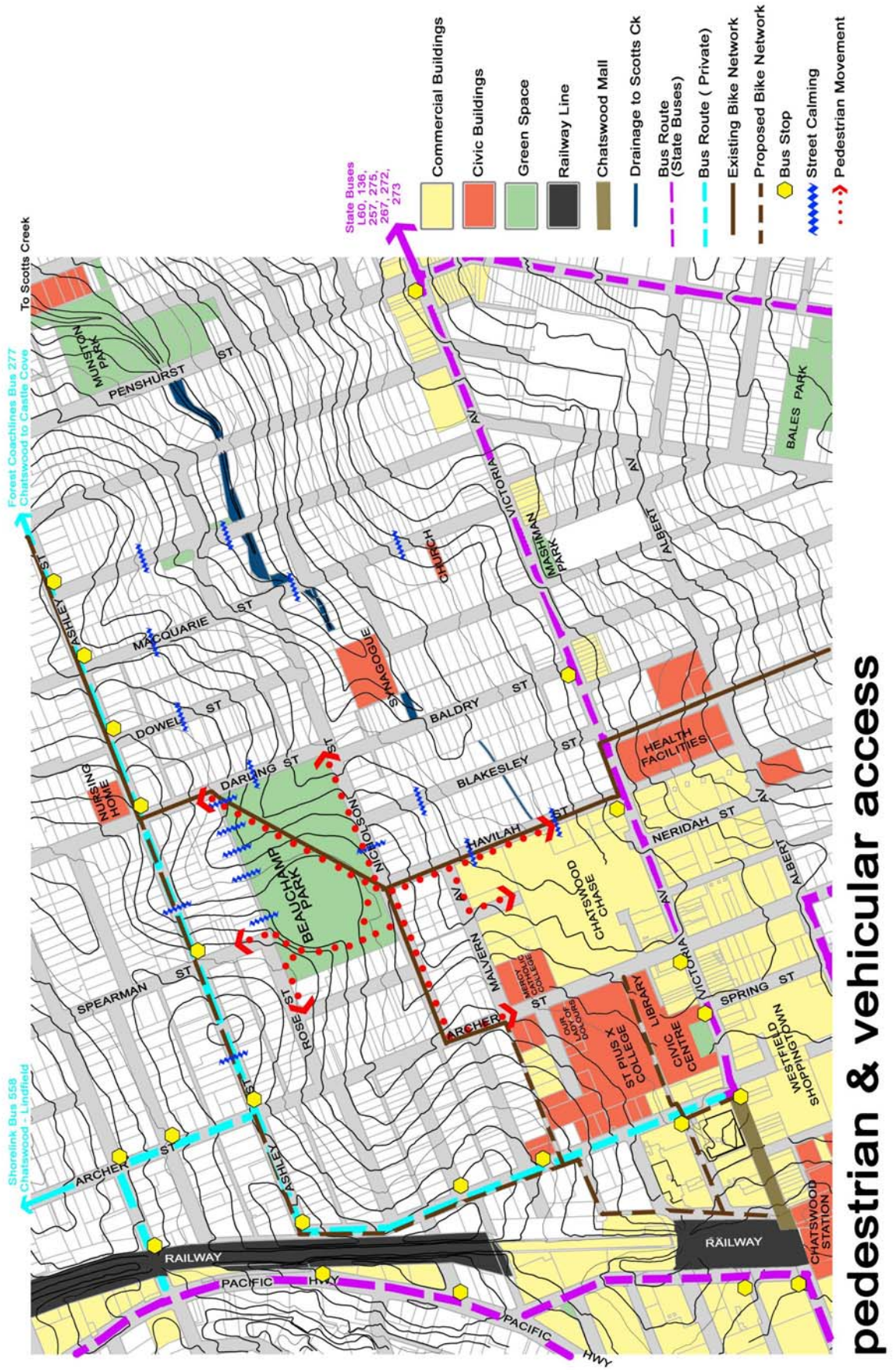
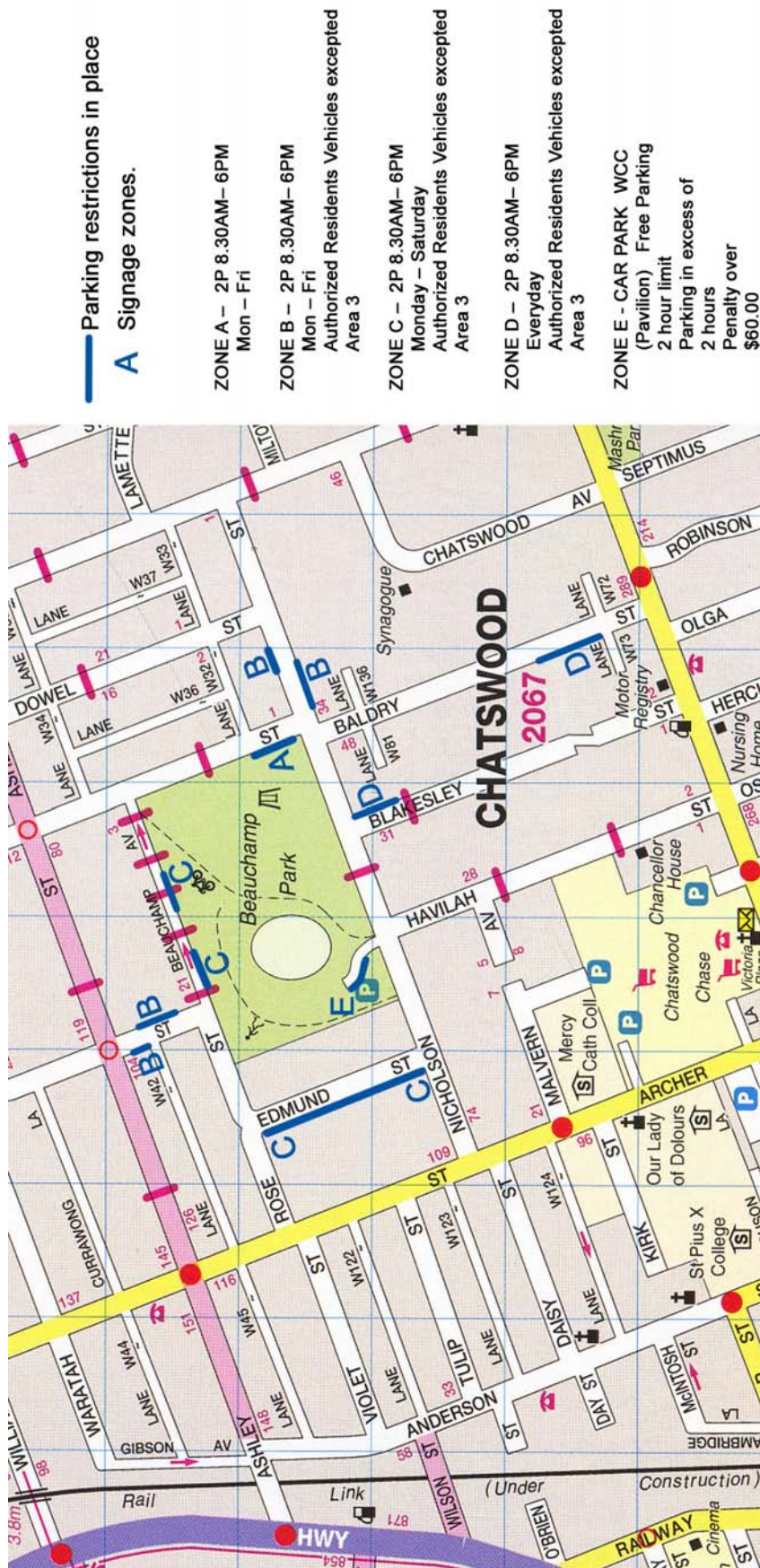


Figure 23: Analysis of the pedestrian and vehicular access to Beauchamp Park.



source: UBD 2006 Sydney & The Blue Mountains Street Directory, 42nd edition

restricted on street parking

Figure 24: Details of street parking restrictions in the vicinity of Beauchamp Park.

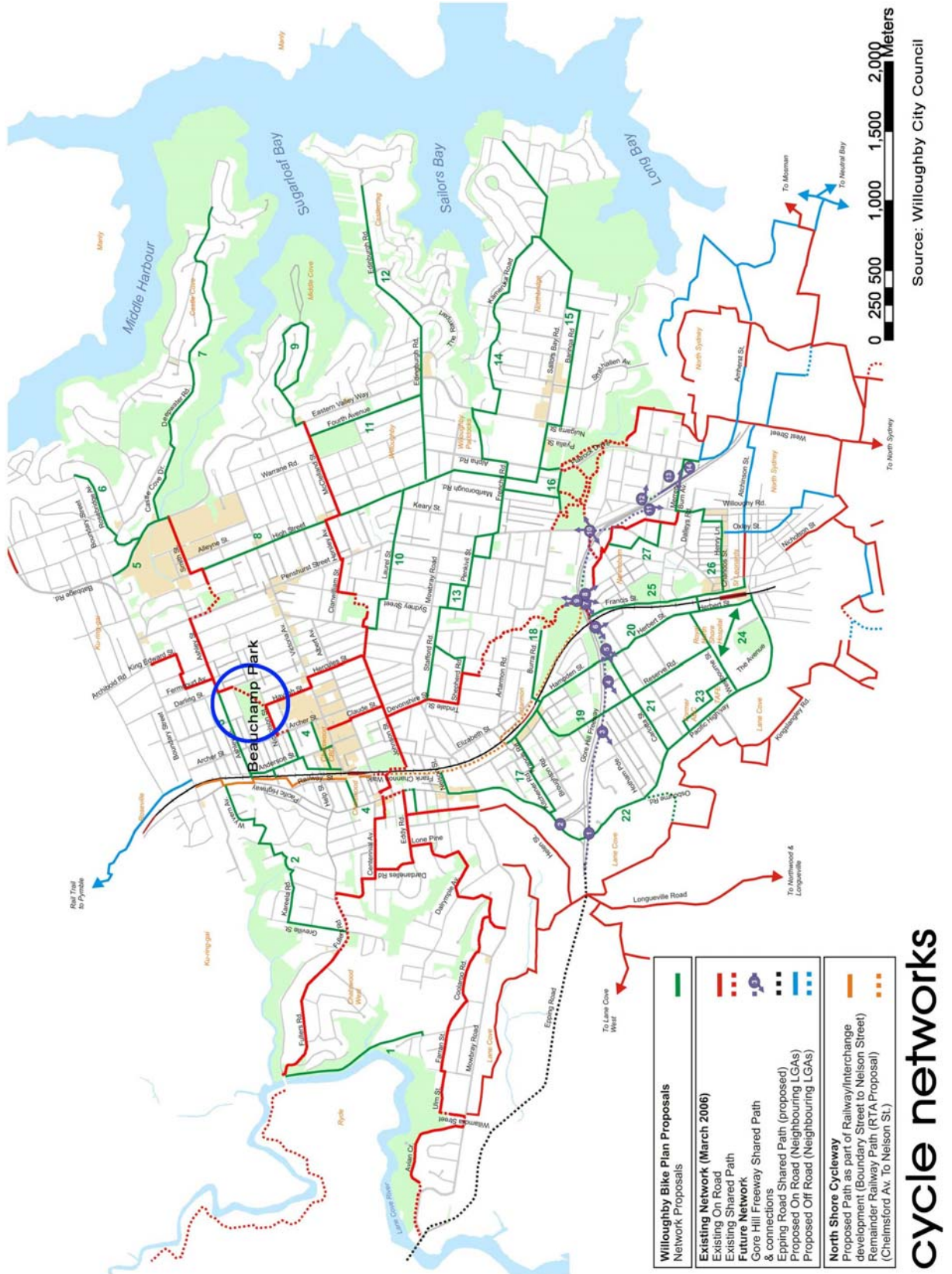


Figure 25: Plan showing Beauchamp Park in relation to cycle networks in the Willoughby LGA.

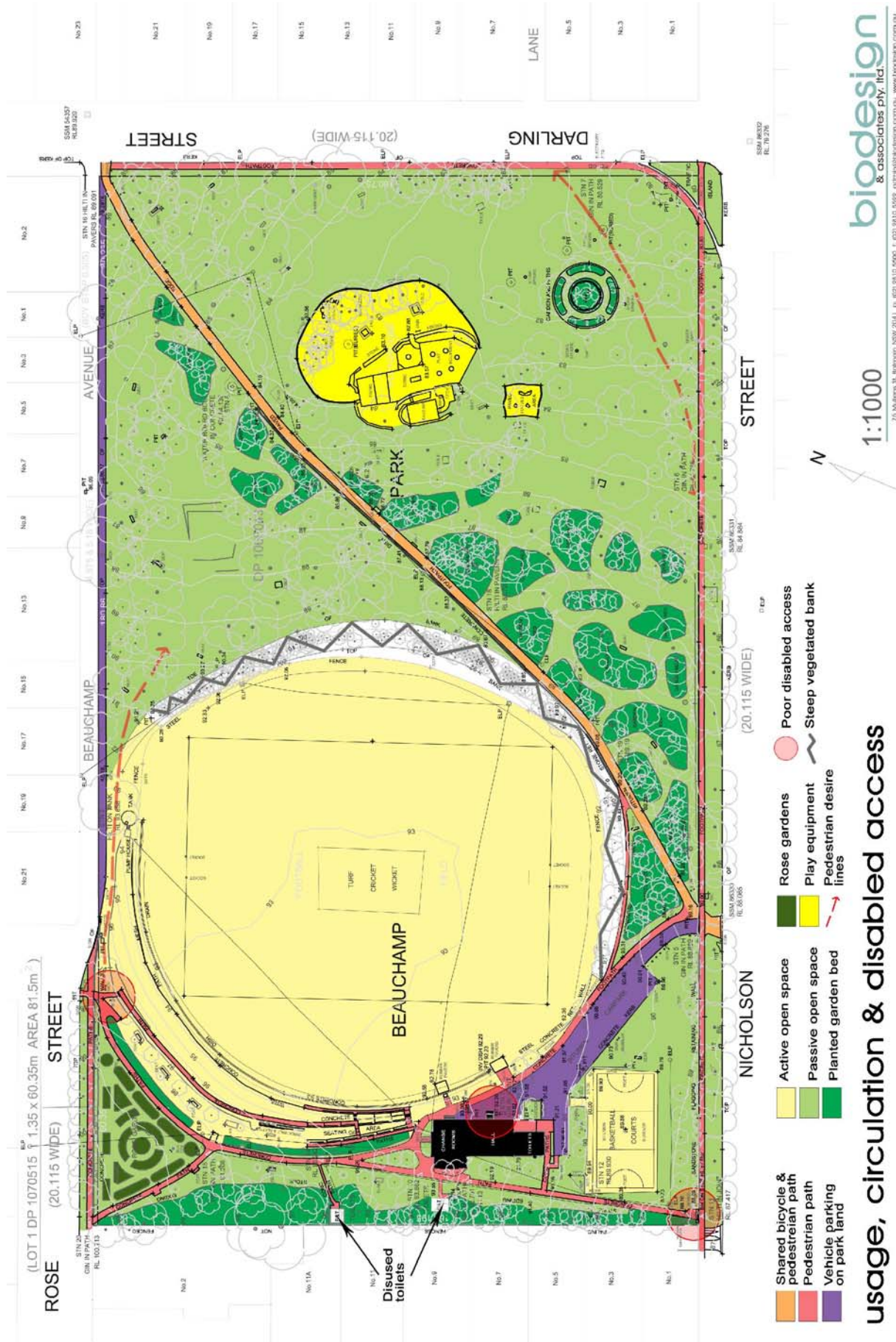


Figure 26: Analysis of the usage, circulation and disabled access within Beauchamp Park.

Recreational Facilities in the Chatswood Area

Other dedicated open space and recreational opportunities near Beauchamp Park are (Figure 27):

- Within 1km: Munston Park and Kooroora Tennis Reserve (to the east).
- Between 1 and 2 kms: Chatswood Park and Chatswood High (to the southwest), Bales Park (to the southeast), Castle Cove and Willis Parks (to the northeast) and Bancroft Park (to the north).

The closest ovals are in Bales Park, Chatswood Park and Chatswood High.

As Beauchamp Park caters for unleashed dogs, a map of other unleashed dog exercise areas within the Willoughby area is detailed in Figure 28.

Existing Site Facilities

The existing facilities and their condition in Beauchamp Park are as follows (Figure 29):

- Turf sportsfield with turf wicket
- Black metal fence 900mm high to oval – moderate condition
- Goal posts
- 4 no. floodlights to oval (for night training) and two floodlights to basketball court
- The pavilion which is in reasonable condition contains a small hall, internal canteen/kitchen, change rooms, verandah and WCC storage/work areas under the verandah and behind the toilets. (Note that there appears to be additional space under the southern end of the pavilion which has been closed off). Disabled access is possible via a ramp on the northern end of the pavilion and the visitor's change room.

The change rooms are divided into two sections as follows:

Visitors, with 2x toilets, 3x showers, change area and lockable cupboard.

Home team, with 1x toilet, 1x urinal, 3x showers, 1x basin and change area.

New toilets, which are in very good condition, are attached to the southern end of the pavilion contain the following:

Male toilet – 1 urinal x 2 people
2 wash basins
3 toilet cubicles

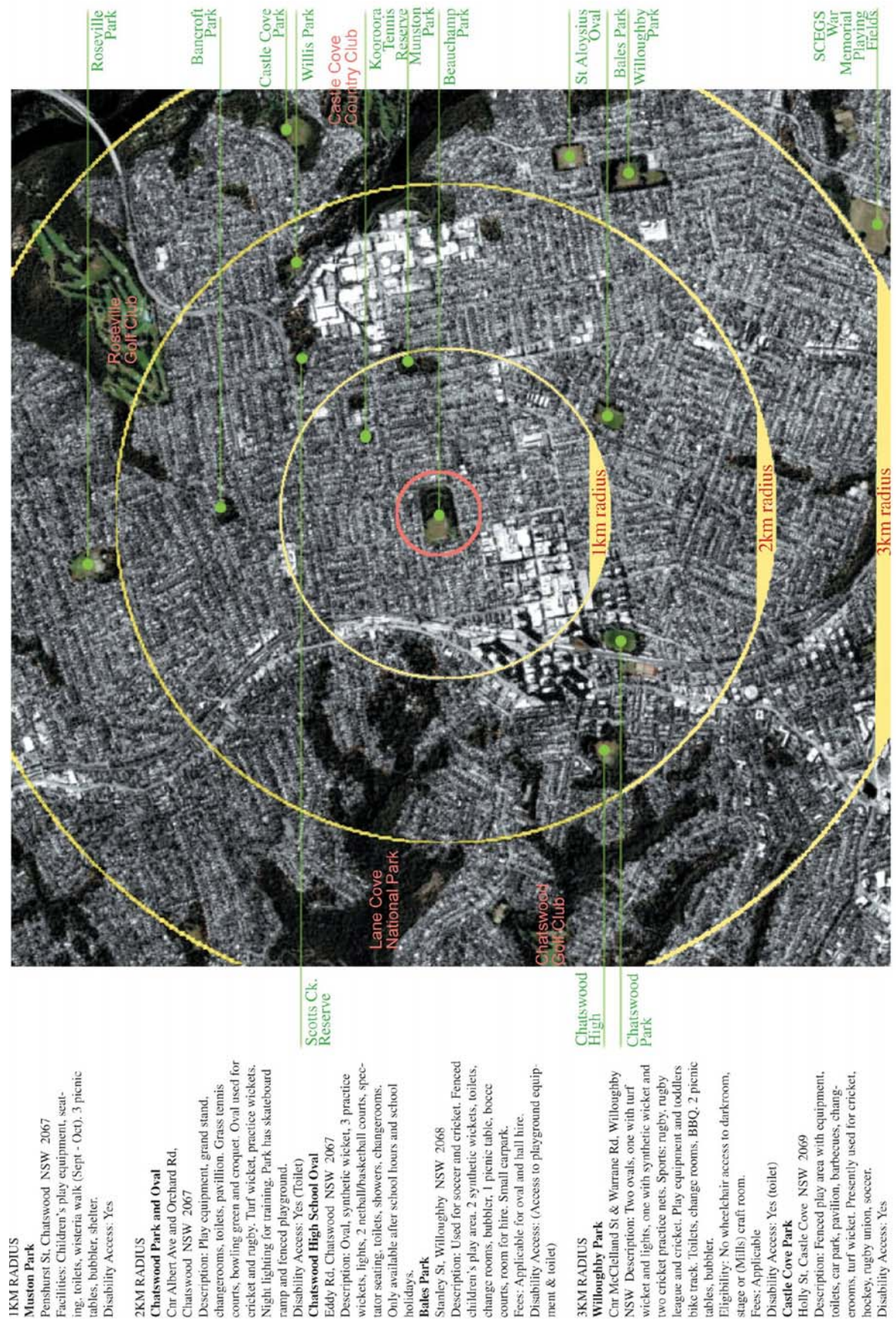
Female toilet – 2 wash basins
3 toilet cubicles

Disabled toilet – no inspection was made as the facility is only accessible by keys held by disabled users.

- The existing playground currently services the 0-5 year olds with a sandpit, 2 sets swings (two swings for older children, two for toddlers), a small slide, a balance beam, and 8 bouncers – 1 bouncer is in need of repair. 4 stone statues on soft fall near the playground provide a secondary play feature. The overgrown remains of the "International Grove" fountain at the corner of Nicholson and Darling Streets provides a third, more intimate space for children to explore. The most common complaint about the park (see Section 3.2.4) was that the playground did not cater for older children.
- 8 no. picnic tables & benches – 3 need to be repaired, most need painting
- 23 no. park seats, 3 to be replaced, 3 to be repaired, most need painting
- 4 no. bubblers – 1 in need of repair
- 12 no. taps – 1 in need of repair
- 5 no. bins

- Signage – 3 entry signs (one at the corner of Spearman and Rose Streets, one at the entry to the carpark in Nicholson Street and one at the corner of Beauchamp Avenue and Darling Street) plus 1 sign for playground now exist. No entry sign exists at the corner of Nicholson and Darling Streets.

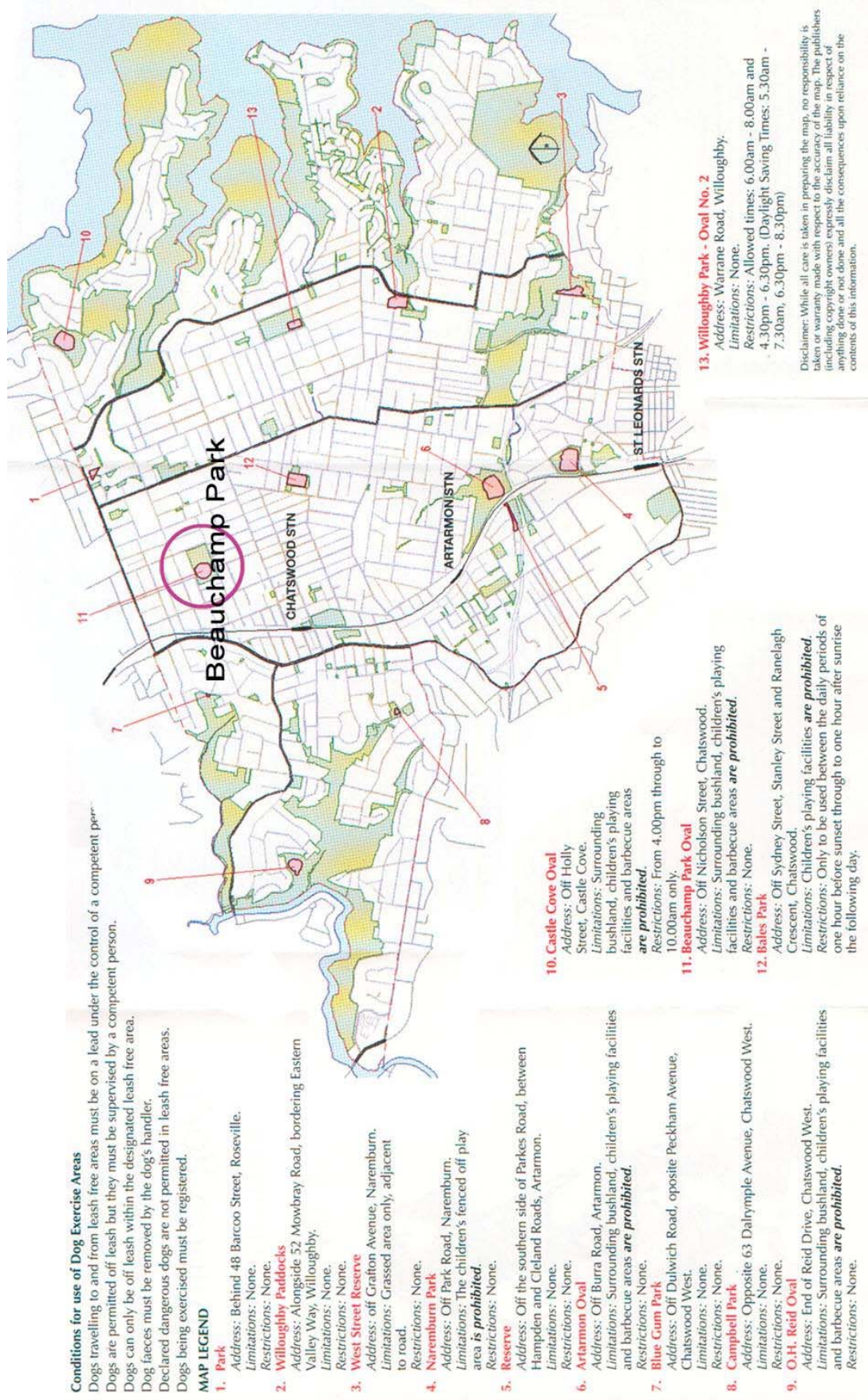
Currently there are no toilets in the lower section of the park. The difficulty of getting to the toilets in the upper section of the park while supervising more than one child in the playground below was raised as an issue at the public meeting. It is also an issue for the disabled and the elderly.



source: Park Details - Willoughby Council - <http://www.datafiction.com.au/>
Aerial Photo - Google Earth, November 2006

surrounding recreational space

Figure 27: Details of other recreational open space in the vicinity of Beauchamp Park.



source: Dog Control in Willoughby City, Willoughby City Council

unleashed dog areas

Figure 28: Details of areas for unleashed dogs in Willoughby. Beauchamp Park is circled.

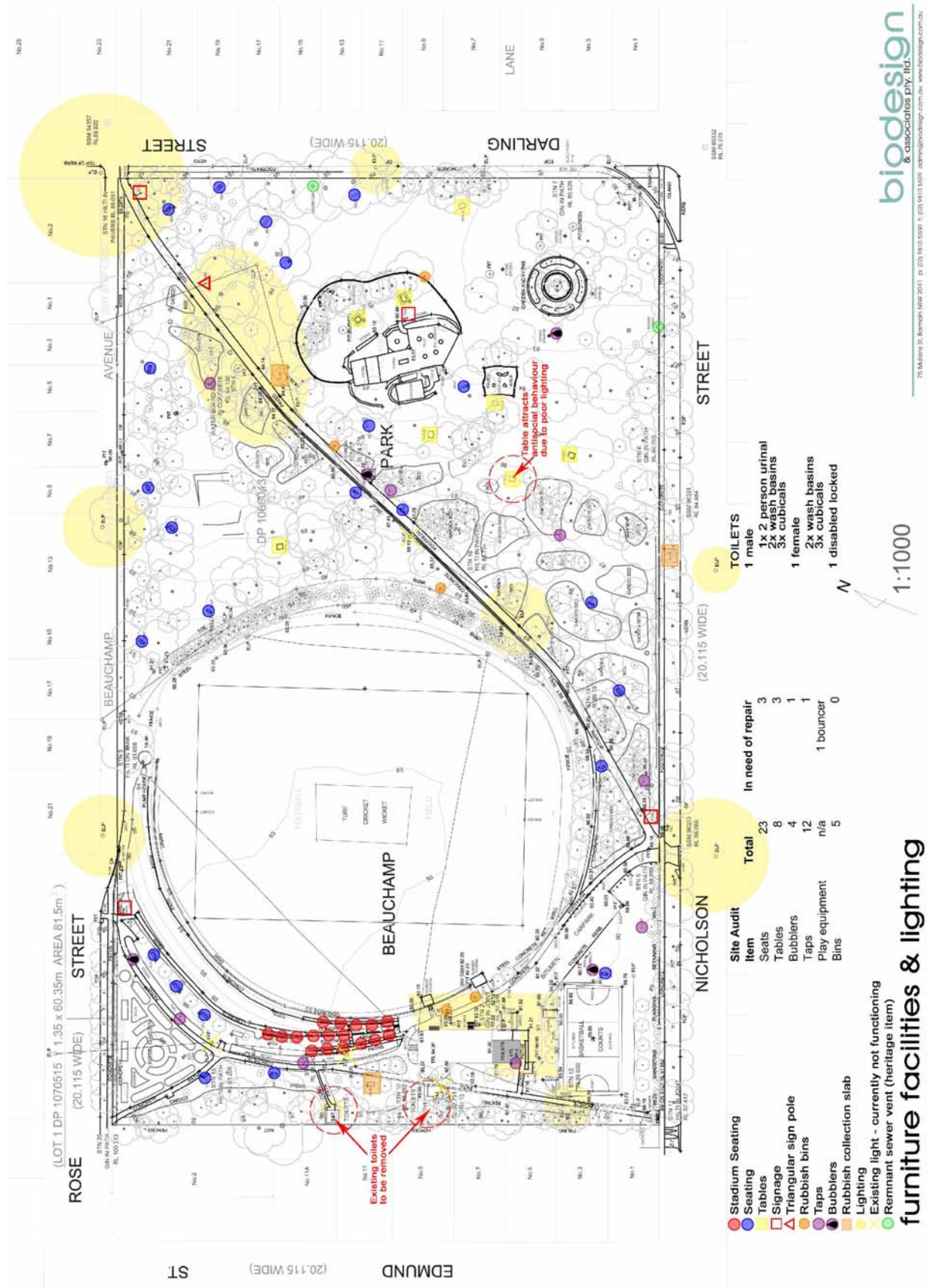


Figure 29: Plan showing locations of furniture, facilities and lighting at Beauchamp Park.

Community Consultation

Community consultation was in the form of:

- user groups – a questionnaire
- residents - a public meeting and written responses

It was supported by:

- the findings from previous community consultation for the Plan of Management (WCC, 1997)
- input from Council staff
- site observations
- emails
- telephone calls

Stakeholders and User Groups

Beauchamp Park is Crown Land under the ownership of the NSW Department of Lands. Willoughby City Council has care and control of the park.

The two sporting groups that currently hire the oval and pavilion on a regular basis are the Gordon District Cricket Club and the Chatswood Rugby Club, the latter group having both Seniors and Juniors. Three local schools in Chatswood currently use the park for sport – Mercy College, St Pius X College and Our Lady of Dolours (Figure 23). Several ethnic groups who are administered by the MOSAIC Centre in Willoughby Council use the pavilion hall for activities on a regular basis – the Taiwanese Dance Group, Italian Social Club, the Chinese Women’s Group and the Italian Christian Workers Association. Two informal exercise groups - Wai Dan Gong and Tai Chi - use the basketball court early every morning. No other user groups were identified by WCC.

A questionnaire was sent to all of the user groups except the Wai Dan Gong and Tai Chi groups, who were interviewed informally, in order to gain feedback about their current and future needs in the park. A summary of the findings can be found in Table 2.3. Please note that no response to the questionnaire was received from Mercy College.

From Table 2.3 it can be seen that the oval, toilets and change rooms are used on weekends from October to March for cricket, and in the evenings and on weekends from March to September for rugby. During weekdays in school terms the oval is used for sport by three local schools. The oval is also accessed all year round when sport is not being played for dog walking, jogging, informal ball games and kite flying by informal users. The pavilion hall is used on weekdays by various ethnic groups. Informal exercise groups meet regularly early every morning on the basket ball court. Both cricket and rugby have been played on the oval more than 50 years. All the current user groups plan to use the facilities at the current level into the future, except for the rugby club which is expanding and will require a second oval and upgraded facilities within the pavilion.

The existing carpark is used by all users of the oval, pavilion and basketball court. The cricket and rugby matches have the highest demand for parking when games are held. At those times overflow parking is available on Nicholson Street.

User group contact details are provided in Appendix C.

TABLE 2.3 - BEAUCHAMP PARK: SUMMARY OF QUESTIONNAIRE RESPONSES FROM USER GROUPS December 2006

RESPONSE TO QUESTIONS	USER GROUP										
	Gordon District Cricket Club (Sydney Cricket Association)	Chatswood Rugby Seniors	Chatswood Rugby Juniors	Mercy College	St Pius x College	Our Lady of Delours	MOSAIC (WCC) and Taiwanese Dance Group	MOSAIC (WCC) Italian Social Group	MOSAIC (WCC) Chinese Women's Group	Performing Arts Unit (WCC)	Wai Dan Gong Exercise Group and Tai Chi
Sport played	Cricket (Seniors)	Football	Football	School sport	School sport	School sport					Exercise
Space Requirements	Full oval	Full oval	Full oval	Full oval	Full oval	Full oval	Hall	Hall	Hall	Hall	Basketball Court
Activities	Grade matches and 'Have a Go' games		Football training and matches, canteen		PE lessons Mon-Fri 9am-3pm (occasionally)	Sport lessons, walkathons, class/school picnics, sport clinics organised by Sporting associations eg basketball, T-ball, cricket etc.	Dance group (10-15 people)	Social group (30-35 people)	Social group (20-25 people)	Italian Christian Workers Association	Informal exercise groups (approx 10 people)
Current Use of Oval SUMMER	Grade Cricket Sat 10am-6pm and 'Have a Go' (ages 5-8) cricket games Sat and Sun 8.30-10.00am October to March (100 families)	Pre Season Training March Tues & Thurs 6.30-8.30pm	Pre Season Training March Tues -Thurs 4.00-6.30pm	Mon-Fri 9.30am-2.30pm	Mon-Fri 9.30am-2.30pm	Fri 9.30-2.45 pm					
AUTUMN - WINTER Apr 1 - Sept 15		Competition every 2nd Saturday for 18 weeks (9 no.) 10.45am-5.00pm, training Tues & Thurs 6.30-8.30pm	Training Tues -Thurs afternoons and early evenings. Matches Fri 6-9pm, Sat 8-11 am and Sun 8am-5pm (max 5 Sundays) - variable use depends on draws & competitions	Mon-Fri 9.30am-2.30pm	Mon-Fri 9.30am-2.30pm. Rugby and soccer training Mon-Thurs 3.10-5pm (after school)	Fri 9.30-2.45pm					
Current Use of Facilities	Oval and pavilion	Oval, hall, change rooms, toilets, basketball court (if ground closed and lighting available)	Oval, hall, change rooms, toilets and parking area		Oval and basketball court	Oval, toilets and occasionally park if too hot on oval	Mondays 9.30 - 11.30am	Tuesdays 9.30-2pm	Fridays 9.30-11.30 am	Weds 10-2pm?	Basketball court and toilets, every day of the year, 6-7am and 7-8am
History of Park Use	60+ years	Club started 1912 - have been at Beauchamp Park at least since the early 1950s	Club started 1912 - have been at Beauchamp Park at least since the early 1950s		20+ years	Many years	3 years	5 years	6 weeks		15 years
Parking Requirements	Whole carpark plus overflow onto street	50 cars (whole carpark plus overflow onto street)	50 cars (whole carpark plus overflow onto street)		1 space for staff occasionally (winter)	None (they walk)					Approx 6 cars
Future Needs	As now existing	An alternative playing field or 2nd oval	Club is increasing 50-100 children/yr; 2007 - 250 registered players, 2012 -500 players. A second oval needed in future. Modifications to hall - increased seating capacity around hall, new window for canteen service and widening of stairs for better access		As now existing	May need to use park between 1-2pm weekdays in 2008 and beyond while Civic Place being constructed	According to MOSAIC work plan and social plan	According to MOSAIC work plan and social plan	According to MOSAIC work plan and social plan		As now existing
Likes	Oval has good surface and turf wicket which is well maintained, good location close to shops, adequate pavilion, good spectator seating, local residents come by, close to Chatswood Oval.	Appearance, good lighting for training/night games	Good location, appearance and lighting for training/night games. New toilets are a big improvement.		Close to school	The space, grass, playground, beautiful setting for children to play and relax in, close to school	Open space	Open space	Open space		
Dislikes	Damage to surface by rugby (only OK by late Feb), lack of separate change rooms for each team, no permanent scoreboard, no lockable space in kitchen, dog poo is a health hazard.	Field size, single playing area, wet weather affected particularly on western side (around cicket pitch)	Field size (corners of dead-ball cut off and single playing area), wet weather affected, particularly on western side because of cricket pitch.		Grandstand doesn't provide enough protection	Lack of shade on the oval					Opening time of toilets is irregular, sometimes 6am sometimes 9am, not enough shade on eastern side of court.
Problems or Conflicts	Encroachment on cricket season by rugby club, constant conflict with some dog owners and questioning by social groups who use pavilion	A lot of wear and tear at end of rugby season (winter) when grass growth is limited - due to overuse by schools or insufficient watering?	Off leash dogs especially when Under 6s and 7s train with their siblings. Dog poo and hardness of grounds due to drought. Limited access on Sundays. Closure of oval after slight rain and slowness to reopen.		Conflict with corporations at lunchtime	Needle sweep of sandpit is necessary before use (Note: no recent evidence found)	Need storage space; hall is sometimes untidy and not clean; most of the time no soap or paper towels in the toilet; air conditioner out of order	Need storage space; hall is sometimes untidy and not clean; most of the time no soap or paper towels in the toilet; air conditioner out of order	Need storage space; room becoming too small for group	Conflict in sharing change room toilets between a community group in hall and sporting group on oval; current liquor license requirements need investigation; disabled access to hall is poor	No conflict with basketball users who sometimes use other end of court at the same time as the exercise groups
Possible Improvements	Designated off leash dog area elsewhere in park, more grass planting and top dressing in Sept-Oct to repair damage by rugby, maintain and paint pavilion, more equipment storage under and inside pavilion, as well as kitchen storage, small play area adjacent to oval for siblings of 'Have a Go' players.	More robust grass suitable for rugby; remove cricket pitch from middle because of drainage problems in wet weather (or have temporary wicket); shade cloth over spectator seating;	More robust grass suitable for rugby; remove cricket pitch from middle because of drainage problems in wet weather (or have temporary wicket); shade cloth over spectator seating; reconfiguration of park to make two fields			Toilets in playground, shade on oval, fencing of playground or whole park area (have experienced no problems but it makes it easier to supervise children).	Address issues above	Address issues above	Address issues above		Toilets opened by 6am, plant shade trees on eastern end of court.
Future Use of Park	10+ years	10+ years	10+ years		10+ years	10 + years	5 years	5 years	5 years		10+ years

The oval is well liked because of its:

- central location close to schools and shops,
- open space and attractive setting
- well maintained surface and wicket on the oval,
- night lighting
- new toilets

Negative qualities and conflicts in the oval and pavilion area include:

- damage to the cricket field by rugby groups and wear and tear of grass in winter
- dog 'poo' on the oval and conflict between off leash dogs, dog owners and sporting groups
- lack of separate change rooms for each team
- lack of storage space in the pavilion for all groups
- no permanent scoreboard
- limited field size (rugby)
- wet area on the western side
- lack of shade around the oval

Suggested improvements are discussed in Section 2.3.4 Recommendations

Residents

A public meeting was held on November 19, 2006 to determine the current and future needs of residents and any problems or conflicts experienced. Minutes from this meeting are attached in Appendix D. It is intended that another public meeting will be held to discuss the findings of this report and to explore ideas for future changes.

The park has a considerable population of informal users who use the park for dog walking, jogging, informal ball games, exercise, picnics, play, kite flying, reading and relaxing. Observations were made of their usage of the park during 9 no. visits to the park at various times of the day/night during the summer of 2006/7. See Appendix E for the full log of site visits and park users.

Residents were also invited to make written comments to Council - a summary of these comments can be found in Table 2.4.

Safety and Anti-social Behaviour

Anti-social Behaviour

The main issues of anti-social behaviour raised during the community consultation process and noted on site are as follows:

- Some adolescents use the pavilion, basketball court and playground at night for drinking and anti-social behaviour. They leave litter and evidence of drug and alcohol use behind.
- New graffiti was observed on the pavilion on two separate occasions, as well as on the majority of seats and tables in the lower section of the park. The front windows of the pavilion were broken on one occasion. Some signs have also been defaced. Council contractors quickly repaired the glass and removed the graffiti.
- In 2004 the local paper reported that syringes were found in the sand pit in the playground. This issue was also perceived as a problem by a teacher from Our Lady of Dolours but no recent evidence has been reported.

Safety

Recently a child was bitten by a dog running off leash on the oval.

The site was visited at night to determine the level of lighting in the park (Figure 29). It was noted that the level of lighting to the streets around the park and within the park is quite low. Currently adequate lighting in the park is provided only in front of the pavilion and in the adjoining toilets. Lighting to the cross path between Nicholson Street and the corner of Darling Street/Beauchamp Avenue is very patchy – while the path is well lit towards Darling Street, the area between the playground and the oval, where there are numerous densely planted beds, up to Nicholson Street is dark and forbidding. This makes the path feel unsafe at night. The playground and the area above the playground (where a table has been burnt and bongs have been found) is in total darkness. The path behind the pavilion (between Rose and Nicholson Streets) is also very dark - 3 x area lights there are not working.

It was noted that 4 x floodlights provide lighting to the oval for night training and 2 x floodlights now exist to light the basketball court. None of these lights were on when we visited the site on a Monday night.

2.2.3. Delight

Spatial Qualities

Spatial Units

Refer to Figure 30.

At present Beauchamp Park reads as two separate halves, the upper open oval area and the lower closed area, including the playground.

While the oval is attractive, it is not well defined on the eastern, southern and western edges.

Within the lower section of the park are a number of smaller open spaces defined by trees which provide complexity and visual relief from the dense shade. Within the maze of planted beds are even smaller, more intimate spaces where people can hide away if they choose. This means that the park offers a wide range of spatial experiences which are highly valued by the community. Any changes to the park need to maintain this spatial diversity.

Views

Refer to Figure 30.

Because of its location on the side of a hill, Beauchamp Park is not readily visible from the surrounding built up areas. Views into the park occur mainly as one approaches the park from Victoria Street at the end of Havilah, Blakesley and Baldry Streets.

Views out of the park are only possible from the upper levels of the park where a pleasant view over the rooftops south-eastwards towards Mowbray Road (on the next ridgeline) and a view southwest to high rise buildings are currently available.

Looking into the park is very inviting from most sides, particularly into the lower part of the park from surrounding streets because of the basin shape of this area which focuses on the playground, and also from the corner of Rose and Spearman Streets at the highest point of the site looking down over the oval. The view into the basketball court from Nicholson Street is restricted by the existing row of conifers which limits surveillance of the court from outside.

Internally, there is a very pleasant view over the oval, with its backdrop of trees, from the surrounding embankment, however the Cotoneaster hedge, between the rose garden and the pavilion, obstructs the view to the oval from the footpath behind (Figure 30). A potential view exists at the eastern edge of the oval looking down through trees over the playground.

Experiential Qualities

Character and identity

Refer to Figure 30.

Overall Beauchamp Park provides a welcome oasis in the increasingly built-up area around Chatswood and a strong visual focus for the heritage conservation area which surrounds it. The lower part of Beauchamp Park is very inviting because of its topography and a strong structure of established indigenous and native trees in grass. The numerous planting beds with mature understorey shrubs provide a strong contrast to the more open areas, adding mystery as well as colour when in flower. The community values the trees and garden beds very highly, only wishing it to be better maintained.

The upper oval area, by comparison, is open and sunny, with little summer shade and a predominance of exotic trees. The old pavilion, spectator seating, eroded embankment, overhead wires and extensive areas of bitumen give this part of the park a rather run-down appearance. Overall the upper section is disconnected, both visually or physically, from the lower section which creates a somewhat schizophrenic character within the park.

Sensual Qualities

Traffic noise is not a problem because the park is away from the centre of Chatswood and it is not bounded by main roads. The park is big enough and the noise of traffic far enough away that the sounds of birds and the breeze blowing through the trees can be heard within the park, giving it a strong feeling of space and freedom.

The coolness, shade and moistness of the lower section of the park is very appealing, particularly on hot days. Openings within the tree canopy allow enough sunlight to prevent this area from being gloomy. The remains of the “International Grove” fountain at the corner of Nicholson and Darling Streets provide an enclosed, rather mysterious play space for children. The colours and textures of the trunks of the large trees, the soft grass, the shadows and the smell of vegetation all make this area very appealing to the senses.

The upper area, which has few shade trees, suffers from a lack of visual complexity as well as being too bright and hot for comfort during summer. While the rose garden provides a colourful focus within the park which is much loved by residents, a strong framework of trees would help to anchor it in the landscape and allow people to sit in shade while viewing the roses.

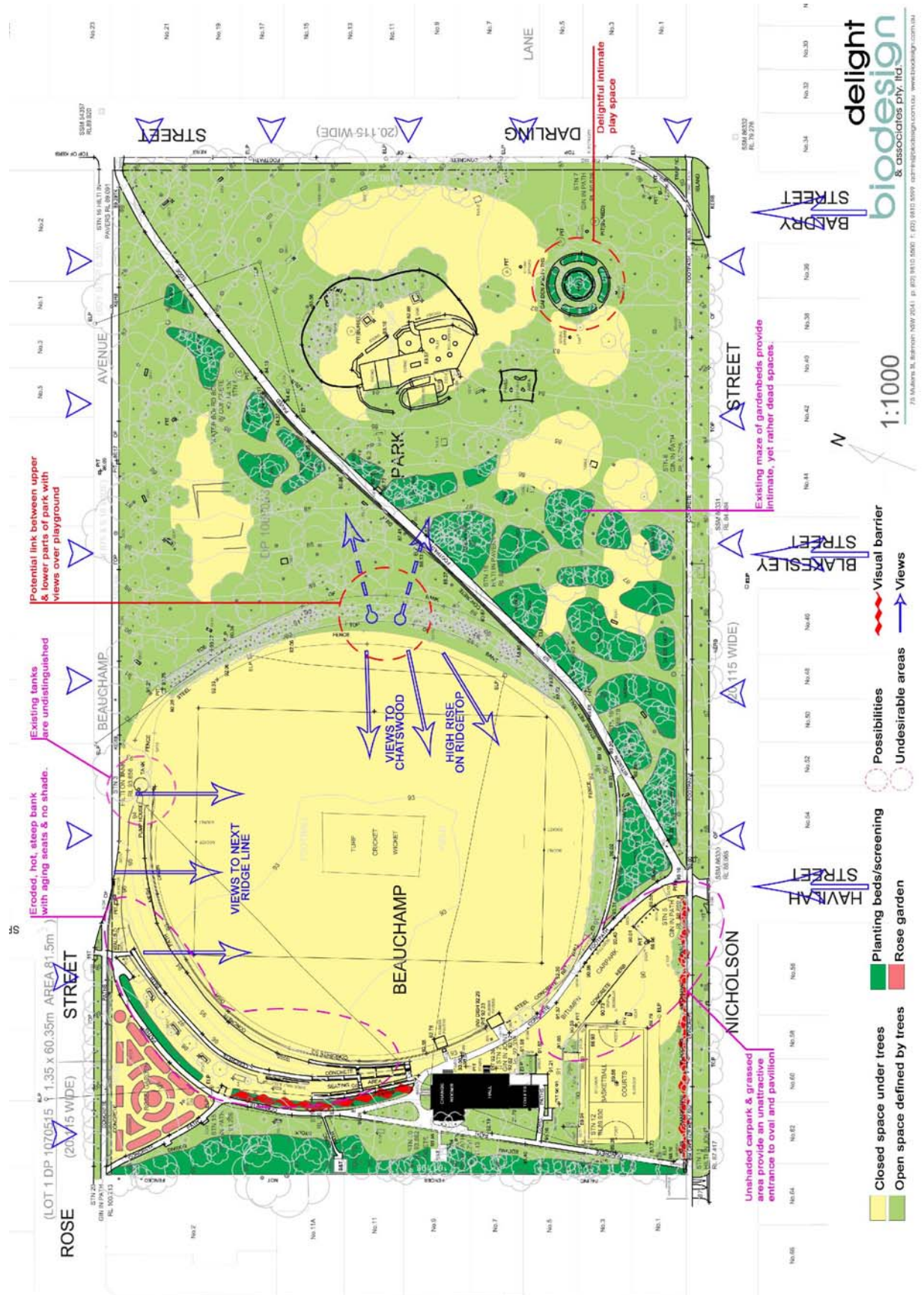


Figure 30: Plan of the positive qualities of Beauchamp Park identified through the “Delight” analysis.

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2.4. Appendices

Appendix A: Methodology

The report and accompanying plans are based on an understanding of integrated catchment management (ICM) and ecologically sustainable development (ESD) principles. Community consultation has been integral throughout the assessment and design process.

The site analysis and design development utilise the “Ecology, Community and Delight” model put forward by Ian Thompson (Thompson, 2000). This is a holistic approach to landscape architecture which ensures that the ecology of a site has equal footing with its cultural and aesthetic values.

The assessment was conducted at three levels - regional, local and site-specific– to ensure that the site is seen in its entire context. The work was overseen by Barbara Buchanan, BioDesign’s senior landscape architect who has over 20 years experience in masterplanning. The assessment process involved:

- site visits by all team members to undertake general and specific assessments and ground-truth data
- reviewing of reports and records of information held by Willoughby Council
- reviewing of literature and written information held by other groups and organisations
- consultation with relevant Willoughby Council staff
- consultation with key stakeholders and user groups
- consultation with other key people identified during the information gathering process
- following up on leads obtained during the research process

In all, 9 site visits were undertaken individually or in pairs by BioDesign staff to:

- collect data;
- record observations about the site and its users;
- take photos;
- ground-truth data sourced from maps and reports; and
- meet representatives of Council.
- and attend public meetings.

Visits were conducted:

- during summer and autumn
- during school/university holidays
- in the mornings, middle of the day, afternoons and at night;
- in sunny, cloudy, and rainy weather; and
- in the middle of the week and on week-ends.

Johan Tenhoedt of WCC prepared a detailed survey of the site which was used as a basis for the site analysis and design drawings. He also provided the base plan for the various site analysis studies.

Plans and images were prepared by BioDesign to summarise and combine data. (Note: they are unreferenced in the figures whereas all drawings or images by others are referenced.)

Ecology

The ecological and arboricultural assessments were undertaken by Sue Hobley with support from Barbara Buchanan. Sue is an environmental scientist with urban horticultural qualifications. The ecological values of the site were identified through:

- literature research
- review of maps and Willoughby Council's information and data
- site surveys
- observations during site visits
- consultation with Willoughby Council's environmental staff

See Tree Issues Report for details of the data collection and analysis methods in relation to the site's trees.

Community

The assessment of the community issues and values was overseen by Barbara Buchanan.

The Aboriginal history of the site was provided by Allen Madden of the Metropolitan Land Council.

The European history of the site was compiled by Barbara Buchanan through research in the Local History section of Willoughby Council Library.

Community consultation was in the form of:

- A public meeting (residents)
- Written responses (residents)
- Questionnaire (user groups)

Supported by:

- The findings from previous community consultation (Plan of Management, 1997)
- Input from Council staff
- Site observations
- Emails
- Telephone calls

The minutes of the public meeting are contained in Appendix C. Representatives of the relevant stakeholder and user groups identified by Willoughby City Council were consulted to identify the current uses, problems, future needs and suggested improvements for the site. The questionnaire was prepared for the user groups to determine their current use and future needs for the oval – this was in the form of ten questions which representatives filled out and returned by email. The full responses to the questionnaire are attached in Appendix D and are summarised in Table 3.

Informal users of the park were also observed during site visits.

Delight

Beauchamp Park was analysed in terms of its aesthetic and experiential qualities which are inherently subjective, but nonetheless identifiable. The analysis was overseen by Barbara Buchanan.

Observations of the spaces visitors used and the qualities of those spaces were considered.

Information obtained during research and community consultation provided clues to how the park is valued by some people.

BioDesign's input was based on personal experiences during site visits in the light of the background research and consultation. Team members who provided input were:

- a mother of three and grandmother;
- a mother of an active adolescent son; and
- a young single male.

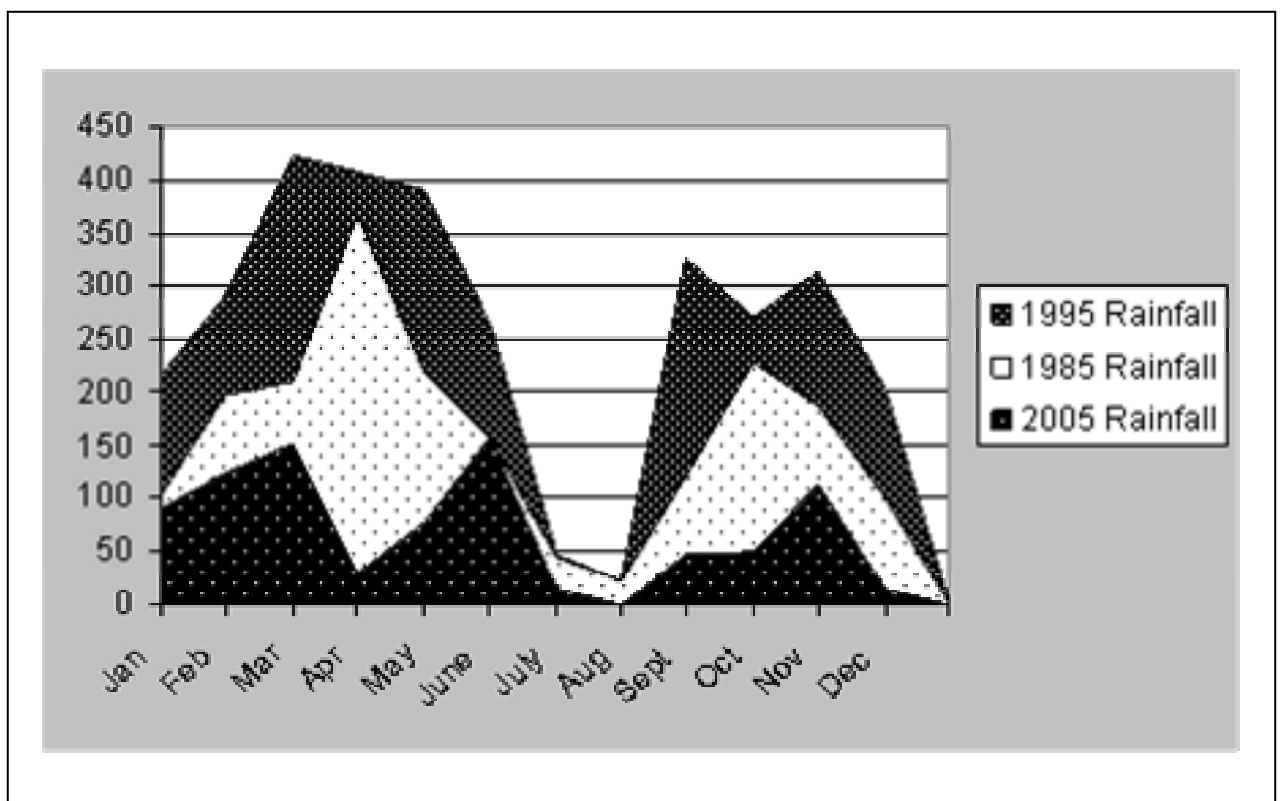
Appendix B: Climate of Willoughby

Temperature

Temperatures in Willoughby range from an average maximum of 26°C in January to 16°C in July. Average minima are 18°C and 8°C respectively. Highest temperature recorded is about 45°C and lowest 2°C. Approximately two days exceed 35°C in summer and two days below 5°C in winter. Frost occurs only in isolated pockets (Willoughby Fact Sheet No.21, 2003)

Rainfall

Total rainfall in Willoughby (data taken from Northbridge Rain Gauge) for 2005 was 873.5mm, a 30% decrease from the average annual rainfall of 1190mm taken over 20 years. Comparisons of rainfall in Northbridge in 1985, 1995 and 2005 show not only very variable rainfall in the last 20 years but a changing pattern (see chart below).



Comparative rainfall data for Northbridge from 1985-2005 (Source: chart prepared by Sue Stanford, Environmental Engineer, Willoughby City Council).

Wind

Willoughby is well ventilated with average wind velocities of 10-12km/hr, predominantly from east to northeast, except in winter when westerlies are more frequent. On most days, the winds are light at night with moderate sea breezes from the northeast in the afternoons (Willoughby Fact Sheet No.21, 2003).

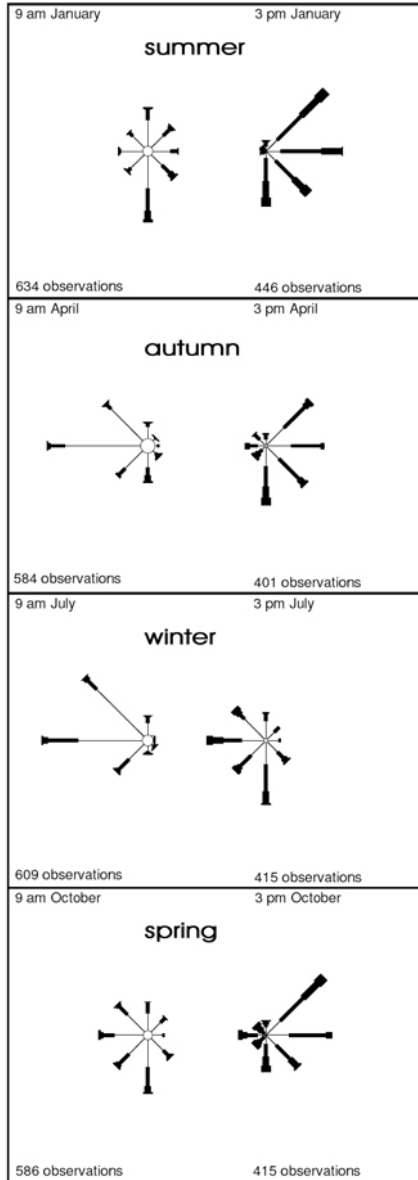
The Bureau of Meteorology provides wind data from 1962 to 2005 for Riverview Observatory, the closest station to Gore Hill (see below for a summary of the data).

Summary of wind data relating to Gore Hill Park (Source: NSW Bureau of Meteorology)

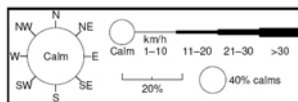
Riverview Observatory

Wind Roses using available data
between 1962 and 2005

Latitude 33°49'33"S • Longitude 151°09'20"E • Elevation 40m



RIVERVIEW WINDS	Morning	Afternoon
Spring	NW, W, SW, S	NE to S (desirable)
Summer	N, NE, SE, S (desirable)	NE, E, SE, S (desirable)
Autumn	W and NW (undesirable)	NE, E, SE, S (desirable)
Winter	W and NW (undesirable)	NW, W, SW, S (undesirable)



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Prepared by Climate and Consultancy Sections in the New South Wales Office of the Bureau of Meteorology
Contact us by phone on (02) 8266 1655, by fax on (02) 8266 1657, or by email on enquiries@bom.gov.au
We have taken all due care but cannot provide any warranty nor accept any liability for this information.

Humidity

Summer in Willoughby is humid but is relieved by afternoon sea breezes (Willoughby Fact Sheet No.21, 2003).

Sunshine

Sunshine varies from an average of 7.5 hours/day from October to January to 5.3 hours/day in June (Willoughby Fact Sheet No.21, 2003)

Appendix C: User Group Contact Details

BEAUCHAMP PARK Stakeholder/User Group Contact Details 14-12-06

Name	Activity	Contact person	Contact details	Address
LAND OWNER				
NSW Dept of Lands		Ian Ferguson	Ph 8836 5312 ian.ferguson@lands.nsw.gov.au	Land Management & Planning, Parramatta
SPORTS CLUBS				
Gordon District Cricket Club	Weekend seniors cricket matches & 'Have a Go Cricket' (Sat mornings)	Jim Cattlin	M 0406 420 929 secretary@gordoncricket.com	
Chatswood Rugby Seniors	Seniors football	Ken Glover	M 0407 007 977 kenglover@bigpond.com	
Chatswood Rugby Juniors	Juniors football	Andrew McMichan (Vice Pres.)	M 0417 002 033 mcmichan@bigpond.com	71 Laurel St Willoughby NSW 2068
SCHOOLS				
Mercy College	School sports	Jane Knapinski (PE)	Ph 9419 2933 mail@mercychatswood.dbb.catholic.edu.au	
St Pius x College	School sports	Grant Andrews (Snr Sports Master)	Ph 9414 4349 gandrews@stpiusx.nsw.edu.au	
Our Lady of Dolours	School sports	Helen Chambers	Ph 9419 2645 mail@ourladychtswd.brokenbay.catholic.edu.au	
RESIDENTS				
Chatswood East Side Progress Association	Resident group	John Hooper (President)	M 0418 239 195 johnhooper@pacific.net.au Ph 9412 2979	9 Ferncourt Ave, Roseville NSW 2069
WCC MOSAIC Centre	Taiwanese Dance Group, Italian Social Group, Chinese Women's Group	Maria-Loreto Lopez	Ph 9777 7952 maria.lopez@willoughby.nsw.gov.au	
WCC Performing Arts	Hall bookings	Allan Rendell Operations Manager	Ph 9777 7639 paunit@willoughby.nsw.gov.au	

Appendix D: Minutes of Public Meeting November 19, 2006

BEAUCHAMP PARK ISSUES

Minutes of Public Meeting - Sunday, November 19, 2006 - 2-3.30pm

Attendance:

WCC - Jeff Organ (Director of Infrastructure Services), Julie Whitfield (Open Space Manager),
Councillors: The Mayor, Pat O'Reilly, Wendy Norton and Judith Rutherford
BioDesign & Associates – Sue Hoblely, Barbara Buchanan
38 residents signed the attendance list.

Residents were welcomed to the meeting by the Mayor
Julie Whitfield spoke about the history and current use of the park.
Barbara Buchanan and Sue Hoblely then asked the meeting a range of questions - the issues raised are summarized below:-

Issues Raised

1. 1996 Plan of Management

John Hooper, the President of the Chatswood East Side Progress Association asked what issues from the PoM had been implemented and what were outstanding. JW stated that she would forward a copy to him.

2. Planted Gardens

These are a highly valued asset and their current neglected state of the gardens is a concern to everyone. Maintenance in the park has declined over the years. A solution to watering needs to be found. Residents want to retain all the garden beds. Suggestions from residents - rainwater tanks, drip irrigation, employ a full time gardener, sustainable practices. It was approved that BioDesign develop some options for the gardens with the aim of producing beautiful, well-maintained but sustainable gardens in view of current water shortages.

3. Dogs

The oval is an unleashed dog area at all times when not used by the sporting groups. Conflict has arisen between dogs off the leash and children playing with balls - one resident stated that his child had been bitten by a dog there. Another resident stated that the oval is one of the few places in the area where dogs are safe from cars and are free to run. An older resident stated that she is scared to walk where dogs are running freely. Other residents raised the physical health benefits for owners of exercising dogs, children playing with them and being safer at night when walking with a dog.

After the meeting one resident stated that people drive to the oval to walk their dogs and that dog walkers hold a Xmas party each year – these issues will need to be raised at the next meeting.

4. Roads and Parking

Parking spaces around the oval are currently used all day including by workers in the Chatswood business district and rail users. Some cars park dangerously close to corners and pram entries are blocked. It was agreed that some controls are needed such as restricted hours but this will need to be enforced and residents need to have permits for their visitors. Current works in Darling Street are being undertaken by Energy Australia who is responsible to repair the road after.

5. Rubbish

Sporting groups currently leave rubbish on the oval - fortunately the local Chinese Tai-Chi group clean it up every day.

6. Playground

Changes to the playground in 1999 have meant that it now only serves 0-3 year olds and older kids are not accommodated. More equipment such as roundabouts and climbing frames need to be installed. Suggestions by residents: the new playground at Willoughby is fantastic, having split

playgrounds for various ages. The suggestion by BB to have skateboard or rollerblading facilities was met with strong disapproval but a cycleway loop for kids using the existing cycle path was acceptable.

7. Antisocial behaviour

Some adolescents drink, litter and yell in the lower section of the park and bottle smashing occurs around the oval on Saturday nights. Late night activities occur on the basketball court. One resident complained about basketball players with loud music and abusive, foul language in the daytime when Council staff were working nearby. It was agreed that youth need activity so the basketball court should be kept but perhaps it could be fenced and locked at night. Another court with more rings would also help.

8. Paths

The footpath in Beauchamp Ave is in very poor condition and narrow. Suggestion to connect up existing paths with a new one in the park nearby was approved providing that more lights not needed.

9. Toilets

Difficulty of using the existing toilets when in the playground with young kids. Suggestion by BB for a BBQ and shelter raised the issues of who would keep it clean and that toilets would be needed near them.

10. Trees

Need more big trees in the upper part of the park around the oval to provide shade and one large tree near the carpark providing views to the oval are not blocked or the rose garden shaded. BB suggested trees around the top part of the oval would help to visually reunite the upper and lower parts of the park and it was agreed that this be looked at.

11. Commercial use of pavilion

One resident asked whether any thought had been given to a commercial use of the pavilion such as a cafe? Other existing users of the pavilion are the Italian women's group, sporting groups 2 x midweek and Saturdays. Vacation care may have now moved.

12. Budget

No budget for changes in the park are currently allocated however this community consultation is timed to be completed by next March so that funding can be allocated towards Beauchamp Park for the 2007-2008 budget. One resident asked how the community can be sure that anything will be built and what process had occurred at Willoughby Park to have funding allocated there.

What residents like about the park

The trees
The rose garden
Such a nice park so close to Chatswood
Many uses for many people,
The oval (a large flat area),
Kids can exercise, meet friends, play
The new toilets

What residents don't like about the park

Rubbish dumping on the verge when gardener stockpiles green waste (concrete area on Nicholson St.)
Defaced signs
Top garden (western side) needs more care
Poor lighting on main cross path in wintertime – causing black spots – feel unsafe.
Compass area (remnants of International Grove) in NE corner – can it be demolished?
Footpaths in lower main path are cracked
Dog-do disposal bin has been relocated to wrong spot.

Entries to oval on Beauchamp Lane side are muddy – need gravel or other treatment.

Next Meeting

It was agreed that another public meeting be called when BioDesign had completed their research and had developed some options for discussion. At that time a committee could be formed if required.

Actions for WCC

Issue copies of 1996 PofM to John Hooper and others

Actions for BioDesign & Associates for the next public meeting

- look at ways of harvesting water and irrigating existing plants,
- investigate alternative species that need less water (possibly using them in some areas while maintaining existing exotics in others)
- investigate current maintenance program in park
- determine how and what times oval is currently used and look at ways of resolving conflict between dogs and other users
- determine times and usage of on- street parking and off-street parking areas
- investigate path system within park and on surrounding streets
- look at options for additional equipment, other play areas and a possible cycle way for older kids
- investigate possible BBQ, shelter and toilet near playground
- investigate fencing, locking and possibly extending the basketball court
- determine appropriate location of shade trees around top of oval
- investigate possibility of commercial use of pavilion

Barbara Buchanan
BioDesign & Associates
20-11-06

Appendix E: Minutes of Public Meeting No. 2 August 5, 2007

BEAUCHAMP PARK ISSUES

Minutes of Public Meeting - Sunday, August 5, 2007 – 2.00-4.00pm

Attendance:

WCC - Jeff Organ (JO) (Director of Infrastructure Services), Liz Paterson (Parks and Reserves Technical Officer).

Councillors: Wendy Norton and Judith Rutherford

BioDesign & Associates –Barbara Buchanan (BB) and Kara Smith

14 residents signed the attendance list.

Apologies: Jenny Moderegger, Jeanette Holst, Sue Hobley, Julie Whitfield.

Residents were welcomed to the meeting by Jeff Organ who stated that the purpose of the meeting was to gain feedback on the Beauchamp Park Draft Issues Report which was prepared by BioDesign and Associates in July 2007 following the first public meeting on November 19, 2006.

Barbara Buchanan then asked the meeting for any corrections to the draft report and in reference to Table 1.2 (pp8-11) to raise any new issues not covered in the report or suggest changes to the draft recommendations. These are summarized below (please note that issues already covered in the draft report are not reiterated here):-

1. CORRECTIONS

Table 2.4 – Suggested improvements - R & H Donnelley – playground improved but not extended. Penny Morris did not receive a copy of the draft report – will send her a copy asap. Marion Johnstone's comments have not been included in the report – she will resend them.

2. NEW ISSUES & RECOMMENDATIONS

Shared Use of Oval

- 1. A number of residents stated they were not happy with the idea of timed off-leash dog use of the oval and wanted separate spaces. John Hooper stated that the oval is too big for controlling dogs by voice control and the fence is too low. He suggested fencing the corner of the park near Darling and Nicholson Streets with a higher fence to create a 24/7 off-leash dog area. 150 sqm per dog and 25 dogs per acre were mentioned – currently the oval may have 12 dogs at any one time. Blenheim Park, North Ryde and Clanville Park (?), were cited as good examples of dog parks. BB stated that this would result in 2 fenced areas and that the lower section of the park would lose its openness. Penny Morris noted that people exercise on the oval with their dogs.
- John Hooper asked if it would be possible to have a noticeboard, updated monthly, to advise residents of the bookings on the oval.
- Another resident asked if it would be possible to have a practice soccer net installed.

Oval Maintenance

- Rob Wilson had noted that complaints about the oval surface in the report and stated that the playing surface was much improved since the 1960s in terms of hardness and coverage.

Oval Size

- Paul Orrock (Chatswood Junior Rugby Club) stated that the changing demographics in Willoughby mean that the number of children wanting to play rugby union is growing – was 140 players 5 years ago, currently 250. Need more playing fields or to look at making oval more available on Sundays. BB stated that they had looked at enlarging the existing oval and creating two playing fields but not enough room. It was noted that increased sports on a Sunday would increase traffic and parking in the park.
- Rob Wilson stated that one of the problems with the size of the playing field comes from the dip on the SE corner which needs building up and the fence realigned.

Pavilion

- The issue of building a new pavilion (JO advised a possible cost of \$300,000-\$400,000) vs renovating the existing in order to have money for other parts of the park was raised by BB. It was agreed that the main priorities for the pavilion are a bigger verandah space to provide shade and wet weather protection, more storage space (possibly utilizing old toilets on western boundary) and a remote controlled scoreboard (possibly removable) where everyone could see it.
- Two trees (see Nos. 102 and 103 in Tree Report) obscure views to goal posts from pavilion.

Basketball Court

- It was suggested that to better use be made of the basketball court for a wider range of people during the day.

Playground

- Problems of sharing playground between different age groups was raised – look at providing separate equipment within the same area – good example at Blenheim Park.
- Problem of safety in the ‘International Grove’ when children climb trees because sandstone below is dangerous.
- Half of the residents stated that they didn’t want BBQ facilities near the playground although picnic tables were desirable. BB asked if it was a good idea to have BBQ facilities near the pavilion for sporting functions (currently BBQ is set up on verandah) Paul Orrock stated they would make good use of a big gas BBQ if provided.
- Roger Donnelley objected to a new toilet, even on built into the embankment, in the lower section of the park because it would need security, lights and will be graffiti prone. He also objected to a viewing platform and stairs on the embankment as it would introduce a whole new area for kids at night, and thus problems of OH & S and disabled access. Another resident stated that it could be incorporated into the landscape with planting and screening.

Park Maintenance

- Roger Donnelley does not want to see any garden beds removed as it will change the character of the park and grass won’t grow there.
- Councillors Rutherford and Norton emphasized that they want to retain Camellias and Azaleas where possible and that local species should not replace exotic species in the garden beds. Need to clarify in the report that “drought-resistant” doesn’t mean local species only.
- Lianne Hooper suggested that we need to look at the long-term landscape management of the park as part of any masterplan to ensure plants are managed well and that capital expenses for planting aren’t wasted.

Water Harvesting

Water harvesting was seen as a major issue to be resolved. John Hooper suggested installing underground tanks at the corner of Darling and Nicholson Streets at junction of SW pipes to capture stormwater for reuse as irrigation in the park funded by grants. JO stated that Council is investigating water harvesting throughout Willoughby and that bore water at Chatswood Oval is fairly saline and requires 50% fresh water to be added.

Parking

It was agreed that in addition to 2-3 hour time limits parking meters be investigated for use along the park side of Nicholson Street. Need to ensure however that residents have easy access to parking permits.

Judith Rutherford suggested that parking police need to be more active about patrolling. Also need to look at closing the parking area at night.

Planting to Upper Section of the Park

- Need to state clearly in report that the rose garden is to be retained.
- Delete the word “schizophrenia” from the report
- Residents are not keen on Eucalypts being planted in upper area – BB suggested that local species would help unify the park and bring back birds.
- Rob Wilson stated that Cotoneaster hedge provided a good windbreak in winter for spectators on the embankment. Need winter sun and summer shade on the bank. Terracing and a new disabled path would also be good – could be combined with seating.

Masterplan

It was generally agreed that a masterplan is the next step forward which would go to public exhibition for further comments.

Barbara Buchanan
BioDesign & Associates
8-08-07

Appendix F: Log of Site Visits and Park Users

BEAUCHAMP PARK
Log of Site Visits and Park Users

Date	Time	Activities/Observations
1. Saturday, November 11, 2006 BB(sunny ,warm and gentle NE wind)	12pm-1pm	Oval – kite flying Cross path – kids cycling up and down hill, joggers and power walker on path Rose Garden – 2 girls lying down
2. Sunday, November 19, 2006 BB, SH (Public Meeting) (warm and sunny)	12-3.30pm	Oval – kids and dogs running freely Around playground -4 groups picnicking (3 small, 1 large) -reading, sleeping, socialising - plus other parents and toddlers in playground Basketball court – 2 groups of 10 Asian young men (playing either end). Parking spaces available in carpark.
3. Wednesday, November 29, 2006 Ben (warm, sunny)	9.00-10.20 am	Oval – 4 joggers running around the perimeter one pair with their dog 1 person walking with 2 unleashed dogs 1 old man sitting at pavilion Basketball court – 2 Asian young men Playground – 2 adults and 5 toddlers (2 groups) Cross path – many people using path All car spaces on surrounding streets taken by 10.20am
4. Monday, December 11, 2006 BB (very hot and sunny)	11am-1pm	Taiwanese group in pavilion hall dancing 3 WCC men rolling wicket, cutting grass Nicholson St fully parked out (parking only on park side). A few joggers but no-one in playground
5. Wednesday, December 20,2006 BB, Ben (cool, overcast, drizzly)	10.30am-1pm	Skateboarder went through central path, 2 basketballers on court, 2 people walking around full perimeter of park, a few people and children in playground; all car spaces taken around park (Xmas shopping? Commuters?)
6. Thursday, December 21, 2006 BB, Ben (warm, sunny, breezy)	1.00 -2.30pm	Two men kicking a ball on the oval, taxi driver and driving instructor having lunch and using toilets, several couples and a group of mothers and toddlers near playground; graffiti being removed from pavilion walls.
7. Thursday, January 11, 2007 BB (cool early morning, sunny)	6.30-7.10am	Wai Dan Gong exercise group (9 people) on basketball court (6am-7am) Tai Chi class runs from 7am-8am. Mixed nationalities. 5 dog walkers and 3 joggers on oval, a man exercising on spectator benches, several walking their dogs elsewhere in the park. Road works continuing in Darling St and Baldry St.

8. Monday, January 15, 2007 BB (warm, clear, breezy (NE))	7.00-8.30pm	Early evening to night, lots of people and dogs on the oval – at one point 13 people, 7 dogs - walking, jogging, kicking a ball. A group of 8 men played football until after dark. 4 young men also played basketball until after dark. In the lower part of the park a man doing Tai Chi, people walking, lovers lying on the grass between the garden beds, a woman walked three dogs, a man with three children in the playground, an mother with her two kids riding bikes, just before dark Lots of bird calls as the sun went down, fruit bats overhead. The toilets were shut by 7pm. Lighting in the park is very patchy, 4 no. lights were not working. The playground is unlit and the central path is very dark along much of its length – some young men were making noise at the burnt table above the playground (where bongos were found) which is in darkness. The pavilion and toilets are well lit.
9. Saturday, January 20, 2007 BB (very hot, sunny, slight breeze)	10.30am	Period between 'Have-a-Go' cricket and afternoon matches – games for children's birthday party underway on oval; family sitting under trees watching two boys playing basketball on court; 4 cars in carpark but parking along Nicholson and Havilah Sts. full; the front windows of the pavilion have been broken and walls covered in graffiti (glass repairer was fixing windows during site visit); a couple walking around edge of park (doing circuits); playground has 3 adults and 4 x under 5's.
10. Saturday, February 3, 2007 BB (sunny and breezy in front of the pavilion).	3.30-4.15pm	Cricket in play on oval, all spectators sitting in the shade of the verandah not on Embankment. Portable scoreboard in use. Changes rooms divided into visitors and home team. Parking area full but several parking spaces along Nicholson Street available.

Beauchamp Park, Chatswood ISSUES REPORT

PART 3: TREE ISSUES REPORT

for Willoughby City Council



BioDesign & Associates Pty Ltd
August, 2007

BEAUCHAMP PARK ISSUES REPORT

This report was commissioned by Willoughby City Council (WCC) because it is 10 years since the last Plan of Management for Beauchamp Park was completed (WCC 1997). BioDesign & Associates Pty Ltd (BioDesign) was commissioned to prepare an Issues Report based on a site analysis of the park that identifies the current and future management issues for the park.

The report is in three parts:

Part 1 – Executive Summary

Part 2 – Detailed Study and Site Analysis

Part 3 – Tree Issues Report

Part 1 contains a summary of the findings of the information review, site analysis and tree assessment, and consultation with community and stakeholders. It identifies the issues which arise from the findings and the opportunities the site presents and makes recommendations that address the issues and take advantage of opportunities.

Part 2 provides the detailed findings of the information review, site analysis and consultation with community and stakeholders, presented in text, graphics and tables and supported by appendices. It enables an understanding of how the issues were identified and the basis of the recommendations.

Part 3 contains the findings of the tree assessments and details of the specific tree management issues in the park. It includes recommendations and maps summarising the data.

The report was prepared by Sue Holey B. Sc, an environmental scientist and arborist, and Barbara Buchanan, B. L. Arch. (Hons 1), a landscape architect.

PART 3 – TREE ISSUES REPORT

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3.1. Beauchamp Park Trees

All trees over 2 metres in height in Beauchamp Park, Chatswood were assessed in terms of provenance, age, condition and risk. The trees were identified to species level where possible and genus level otherwise (one fruit tree could not be identified to genus level). The results were recorded in written form on the attached data sheets and in graphic form on four coloured maps. Due to the large number of trees, the site was divided into four assessment areas (A, B, C and D on the sheets). Observations were made into relation to each of these areas and also in relation to the street tree plantings.

3.2. Findings Shown on the Maps

Map No.1 – Provenance

- Trees in the western (upper) end of the park are predominantly exotic species (red).
- Most of the trees in the lower part of the park are Australian species, including remnant Blue Gum High Forest (BGHF) (blue), planted BGHF (dark green), planted Sydney Basin (light green) or other native species (yellow).

Note: In the absence of flowers or fruit, many of the juvenile and semi-mature specimens could not be identified to species; it is assumed that the recent plantings are of *Eucalyptus saligna*. and they have been shown on the maps as “Planted BGHF”. However, both *E. saligna* and *E. grandis* were identified in the park and this assumption may be erroneous.

- A large number of remnant BGHF trees, including *E. pilularis* (Blackbutt), *Angophora costata* (Sydney Red Gum), *E. acmenoides* (White Mahogany) and *E. paniculata* (Grey Ironbark) are located in Sections B, C and D. These trees are generally the larger, more spreading specimens with more irregular form and spacings. They are in moderate to good health and create a strong framework for other plantings in the park.
- Understorey species are exotic (red) throughout the park.
- Species selection is one of the main factors in creating the difference in character between the upper and lower parts of the park.
- Weed species listed on Council’s Tree and Bushland Preservation Order (TPO) occur throughout the park. The following listed species were surveyed:
 - *Acacia saligna* (Golden Wreath Wattle)
 - *Cotoneaster* sp. (Cotoneaster)
 - *Cinnamomum camphora* (Camphor Laurel) (but over 10m)
 - *Phoenix canariensis* (Phoenix Palm)
 - *Robinia pseudoacacia* (Robinia),
 - *Syagrus romanzoffianum* (Cocos Palm)

Map No.2 – Age

- A few over-mature trees exist in the park but on the whole the large majority of the trees are mature or semi-mature.
- Only a few juvenile trees now exist to replace the older trees.
- From our observations and research (see Historical Timeline), it appears likely that:
 - the large remnant BGHF trees located in Sections B,C and D, are the oldest trees in the park. John Hammond is known to have first cleared the site in 1864 but it is not known whether these trees date from before that time or are regrowth.
 - The Phoenix Palms along Nicholson Street, the conifers along the western boundary, the rose garden and the garden beds of Camellias, Azaleas, Magnolias and other exotics in the lower section are the next oldest, probably dating from the late 1920s when the oval and grandstand were first constructed or shortly thereafter. The few specimens of *Cupressus sempervirens* (Italian Cypress) on the embankment may date from this period.
 - There are a number of mature, but younger, Eucalypts and Turpentines (*Syncarpia glomulifera*) which appear at first glance to be remnant but which on closer observation can be seen to have been planted. The stands of *Corymbia maculata* (Spotted Gum) around the playground (Section D) were almost certainly planted in the mid 1950s by Rex Hazlewood although we were unable to find written proof of this. It is likely that the Turpentines and the Ironbarks of similar age in Sections C and D were planted at the same time by Hazlewood - his trademark style of planting of informally spaced stands of a single species can be clearly seen.
 - The trees in the circular beds at the corner of Nicholson and Darling Streets, including the Cocos Palms, were most likely planted in 1965 as part of the International Grove. The Bottlebrush plantings in the nature strip along Rose Street may also date from this time.
 - The semi-mature plantings of *S. glomulifera* (Turpentine) and *E. saligna* (Blue Gum) in Section B appear to have been planted in the last 10-20 years.
 - The Casuarinas on the embankment below the oval were planted in 1995 to soak up water (pers. comm., Julie Whitfield, 27-4-07).
 - Recent plantings of juvenile Eucalypts are near the corner of Beauchamp Avenue and Darling Street (Section D) and in parts of Section C.
 - There are also recent plantings of a number of young exotic trees in Section A west of the oval.

Map No.3 – Condition

- The condition of the trees in Beauchamp Park is variable with a relatively large number in poor to moderate condition. In particular, many of the conifers along the western boundary (Section A) and the understorey of exotic shrubs

in beds in Sections A-D are not thriving. This is probably due to the reduced watering they have received under the current water restrictions.

- Most of the *Allocasuarina littoralis* plantings along the embankment beside the oval are in moderate condition at best but several specimens are in very poor condition.
- The larger remnant and planted BGHF trees and other Eucalypts in Sections B, C and D are in moderate to good condition which means that the structural plantings in the park are sound.
- Many of the more recent plantings of *Eucalyptus saligna* are not thriving and some appear diseased. They are growing in grass and some have stem damage consistent with impacts of mowing or whippersnipping.
- Quite a few old trees have fruiting bodies of *Ganoderma* spp., a fungus that will eventually kill the host tree. In all cases, the trees have been pruned at some stage, usually having had large branches (or the stubs of failed ones) pruned. The possibility therefore exists that the trees have been infected with the fungus as a result of work practices.

Map No.4 – Risk

- Although quite a few trees have structural problems requiring attention, very few present a serious risk because they are located in areas unused or infrequently used by people and away from structures.
- Most trees are either not a risk management problem (no colour) or only a low risk (yellow).
- There are several trees of medium risk (orange) in the lower section.
- There are very few trees that present a high risk (red).
- A few dead trees are present but mostly in locations that do not result in them being a high risk.
- In most cases, the risks are associated with structural problems in the crown of the tree - branch failure is likely. No problems with root plates were noted but several heavily leaning specimens were noted.
- The *Corymbia maculata* plantings around the playground are generally in a safe and good condition but a few specimens have health or structural conditions that require monitoring. Due to their vicinity to this high use area, safety concerns need to be managed.

3.3. Findings in Different Sections of the Park

The park is divided into two distinct sections: the upper (western) area is open and sunny and looks formal and man-made and the lower (eastern) area is shady and looks informal and natural.

Section A.

- The plantings are a hotchpotch of different species from different places and are unrelated to different parts of this section and to the plantings in the lower sections of the park.
- The blossom trees in the beds near the entry to the park have been planted amongst old indigenous and native trees and this creates conflicts of interest when it comes to horticultural management.
- Several of the blossom trees are in poor condition.
- It is possible that two Narrow-leafed Ironbarks (*Eucalyptus crebra*) were planted as markers at the top of the long footpath that passes across the park. The species occurs on the Cumberland Plains in Western Sydney.
- Several recent plantings of Turpentines and exotic trees are linear which makes them appear contrived in relation to the older, more informal plantings elsewhere in the park.
- Although the conifer garden is not thriving, some individual specimens are in good condition.
- The *Callistemon viminalis* (Weeping Bottlebrush) plantings along the Nicholson Street nature strip are reaching the end of their useful life.
- The recent plantings of *Pyrus calleryana* (Callery Pear) are in an exposed situation and are partially defoliated due to wind. They are not providing the autumn display for which the species is grown and have a rather 'forlorn' appearance.

Section B

- Many of the juvenile Eucalypts that have been planted in the NE corner of the park are spaced evenly amongst the remnant trees which unfortunately creates the appearance of a plantation rather than the informal groupings which define the rest of the mature and semi-mature Eucalypts in that area.
- The *Phoenix* spp. are out of character with the other plantings.
- The relatively recent plantings of *Syncarpia glomulifera* are performing well in most cases.
- The relatively recent plantings of *Eucalyptus saligna* are performing poorly in many cases and need to be culled. Improving the rootzone environment may improve outcomes for those that are worth retaining but the mature specimens of the species are not thriving either, so the soil conditions may be unsuitable or the impacts of drought may have affected them.
- The embankment plantings of *Allocasuarina littoralis* have a large gap in them in a section containing several old *Cupressus sempervirens* and *Callitris rhomboidea* (Port Jackson Cypress) specimens. This section of the embankment has a different character to the other sections. It appears that

some old trees have been removed. *Casuarina cunninghamiana* has been planted in places.

- The plantings of *Cupressus sempervirens* amongst the *Allocasuarina littoralis* plantings along the embankment beside the oval are visually out of place, particularly when viewed from the upper section of the park.

Section C

- The garden beds have been built up around remnant trees.
- The understorey plantings of exotic species have different water and fertiliser requirements to the trees.

Section D

- The same issues as for Section B are noted in relation to recent plantings and the display gardens beside the path.
- The International Grove contains a mixture of unrelated species that are mostly in poor to moderate condition.
- The plantings along the streetscape are a mixture of species and the line of *Phoenix* spp. (not all specimens are *P. canariensis*) breaks down in this section.

3.4. Street Trees

In general, the boundaries of the park are not consistently defined by trees with the result that each of the three street frontages has a different character.

Nicholson Street

- The *P. canariensis* specimens along Nicholson Street are mature and mostly in good condition.
- They may have heritage value.
- They are listed as weeds on Council's TPO.
- The integrity on the plantings has been compromised over the years by interplantings of Eucalypts of mixed species, presumably planted where gaps have occurred.

Darling Street

The eastern edge of the park contains a mixture of remnant and planted species from the Blue Gum High Forest vegetation community.

- All the plantings are mature and some are quite old.
- Because the power lines run along the edge of the park, a number of the trees have been lopped to provide clearance. This work has not been in accordance with the Australian Standard AS4373-2007 Pruning of Amenity Trees.

Rose Street and Beauchamp Avenue

- The Rose Street frontage contains old plantings of *Callistemon viminalis* (Weeping Bottlebrush) which are reaching the end of their useful life. They overhang car-parking zones.

- The Beauchamp Avenue frontage contains a mixture of large old remnant trees and plantings of indigenous, native and exotic species which could be simplified.

3.5. Recommendations

Based on our findings the following recommendations are made:

1. As Blue Gum High Forest (BGHF) is a listed endangered ecological community in Sydney that no longer exists in pristine form in the Willoughby City Council area, the remnant trees in the lower part of Beauchamp Park (Areas B,C and D) are highly significant. Both the remnant trees and the planted Spotted Gums are large, mature and generally healthy - together they give the park a highly distinctive and aesthetically pleasing character which is highly valued by the community. It is therefore recommended that this character should form the basis of any tree masterplan for Beauchamp Park, in particularly the upper part of the park (Area A).
2. Where possible remnant trees should be reinforced with new plantings grown from local provenance seed to ensure that a younger generation of trees replace the old ones. Note however that any new *E. saligna* (Sydney Blue Gum) plantings should be located away from areas of intensive use such as the playground, paths and picnic areas.
3. It was noted that some of the remnant trees are infected with *Ganoderma* spp. As this fungus cannot be treated it is recommended that a suitably qualified tree surgeon be engaged to carry out a detailed investigation to determine the extent of the problem and how best to deal with it. Contractors or tree surgeons need to ensure that their tools have been properly cleaned and disinfected before they undertake surgery on any trees in the park to avoid further spread of *Ganoderma* spp.
4. Where possible remove garden beds from under healthy remnant Eucalypts to be retained (Areas B and C). Selectively reduce the overall number of garden beds and replace any existing old or drought intolerant shrubs with flowering 'waterwise' species of exotic, native and indigenous provenance to create a floral display along the diagonal pathway.
5. Weed species listed on Council's TPO should be removed. Future plantings in the park should address the TPO and the Noxious Weeds Act. The specimen of *Acacia saligna* should be removed before it flowers and seeds in spring.
6. The streetscape around the entire Park should be reconsidered so that as old trees are removed they can be replaced in accordance with a tree masterplan that will provide a coherent border to Beauchamp Park.
 - Along Nicholson Street it is recommended that the *Phoenix* palms should either:
 - all be removed over time, and the street replanted with BGHF species to match the rest of the park OR
 - the row of Phoenix palms retained and the odd Eucalypts replaced by new *Phoenix* spp. (note however that *P. canariensis* is listed as a weed on Council's TPO).
 - On the western boundary (Area A), the conifer garden is not thriving and many of the plants are either partly dead or in poor condition. Their character is also not in keeping with the lower section of the park. It is therefore recommended that they should be replaced with BGHF species, either in stages as trees die or by clearing and replanting the whole garden.

- Along Rose Street the existing Bottlebrushes which are nearing the end of their life should be replaced by BGHF species.
7. The *Allocasuarina littoralis* plantings below the oval embankment should be underplanted with indigenous shrubs such as *Dianella* spp. or grasses to improve the vigour of the plantings and reduce mowing. Remove the Italian Cypresses.
 8. Remove grass and mulch the rootzones of the row of Turpentine to the south of the basketball court.
 9. The International Grove plantings, including the Cocos Palms, are not considered worth preserving in terms of their condition or provenance unless they are deemed valuable in terms of children's play.

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A1	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Good
A2	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Good
A3	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Good
A4	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
A5	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Dead	Low	Dead
A6	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Good
A7	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Good
A8	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Moderate
A9	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Good
A10	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
A11	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Good
A12	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Good
A13	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
A14	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate
A15	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature		Good
A16	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Mature		Poor
A17	<i>Camellia sasanqua</i>	Sasanqua	Exotic	Mature		Moderate
A18	<i>Tibouchina granulosa</i>	Lasiandra	Exotic	Mature		Poor
A19	<i>Malus sp.</i>	Ornamental Blossom Tree	Exotic	Semi-mature		Moderate
A20	<i>Malus sp.</i>	Ornamental Blossom Tree	Exotic	Semi-mature		Good
A21	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Over-mature		Poor
A22	<i>Rothmannia globosa</i>	Tree Gardenia	Exotic	Mature		Good
A23	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Juvenile		Poor
A24	<i>Camellia sasanqua</i>	Sasanqua	Exotic	Mature		Poor
A25	<i>Fagus sylvatica</i>	European Beech	Exotic	Juvenile		Poor
A26	<i>Camellia sasanqua</i>	Sasanqua	Exotic	Mature		Good
A27	<i>Eucalyptus cinerea</i>	Argyle Apple	Native	Mature	Low	Good
A28	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature		Good
A29	<i>Eucalyptus crebra</i>	Narrow-leafed Ironbark	Planted SB	Mature	Low	Good
A30	<i>Rhaphiolepis umbellata</i>	Yeddo Hawthorn	Exotic	Mature		Moderate
A31	<i>Photinia glabra 'Rubens'</i>	Photinia	Exotic	Mature		Moderate
A32	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Semi-mature		Poor
A33	<i>Melaleuca quinquenervia</i>	Broad-leaf Paperbark	Planted SB	Mature		Good
A34	<i>Malus sp.</i>	Ornamental Blossom Tree	Exotic	Mature		Moderate
A35	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Over-mature		Poor

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A36	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Mature		Moderate
A37	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Mature		Moderate
A38	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Mature		Poor
A39	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Over-mature	Medium	Poor
A40	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Moderate
A41	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Moderate
A42	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
A43	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Moderate
A44	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature		Good
A45	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
A46	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
A47	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
A48	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A49	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A50	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A51	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A52	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A53	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A54	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A55	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A56	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A57	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A58	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A59	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A60	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A61	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A62	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A63	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A64	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A65	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A66	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A67	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A68	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A69	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A70	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A71	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A72	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A73	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Good
A74	<i>Acacia saligna</i>	Golden Wreath Wattle	Native	Semi-mature		Good
A75	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature		Good
A76	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature		Good
A77	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
A78	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
A79	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
A80	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature	Low	Moderate
A81	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
A82	<i>Chamaecyparis obtusa cv.</i>	Bookleaf Cypress	Exotic	Mature	Low	Moderate
A83	<i>Thuja plicata</i>	Western Red Cedar	Exotic	Mature	Low	Good
A84	<i>Photinia glabra 'Rubens'</i>	Photinia	Exotic	Mature		Poor
A85	<i>Photinia glabra 'Rubens'</i>	Photinia	Exotic	Mature		Poor
A86	<i>Chamaecyparis pisifera</i>	Sawara Cypress	Exotic	Mature		Moderate
A87	<i>Juniperus sp.</i>	Juniper	Exotic	Mature	Medium	Poor
A88	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Moderate
A89	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature	Low	Moderate
A90	<i>Chamaecyparis lawsoniana</i>	Lawson Cypress	Exotic	Mature	Low	Poor
A91	<i>Chamaecyparis lawsoniana</i>	Lawson Cypress	Exotic	Mature	Low	Moderate
A92	<i>Thuja plicata</i>	Western Red Cedar	Exotic	Mature	Low	Poor
A93	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature	Low	Moderate
A94	<i>Juniperus sp.</i>	Juniper	Exotic	Mature	Low	Moderate
A95	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Good
A96	<i>Gleditsia triacanthos cv.</i>	Honey Locust	Exotic	Semi-mature		Good
A97	<i>Acer buergerianum</i>	Trident Maple	Exotic	Semi-mature		Good
A98	<i>Acer buergerianum</i>	Trident Maple	Exotic	Semi-mature		Moderate
A99	<i>Acer buergerianum</i>	Trident Maple	Exotic	Semi-mature		Good
A100	<i>Gleditsia triacanthos cv.</i>	Honey Locust	Exotic	Semi-mature	Low	Moderate
A101	<i>Cupressus torulosa</i>	Bhutan Cypress	Exotic	Mature		Good
A102	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature	Low	Moderate
A103	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature	Low	Poor
A104	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature		Good
A105	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A106	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature		Good
A107	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature		Good
A108	<i>Waterhousea floribunda</i>	Waterhousea	Native	Semi-mature		Good
A109	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A110	<i>Juniperus sp.</i>	Juniper	Exotic	Mature		Moderate
A111	<i>Thuja sp.</i>	Western Red Cedar	Exotic	Semi-mature	Low	Poor
A112	<i>Juniperus communis cv.</i>	Juniper	Exotic	Semi-mature	Low	Poor
A113	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature	Low	Poor
A114	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Juvenile		Good
A115	<i>Juniperus sp.</i>	Juniper	Exotic	Juvenile	Low	Poor
A116	<i>Thuja occidentalis</i>	White Cedar	Exotic	Mature		Moderate
A117	<i>Thuja plicata</i>	Western Red Cedar	Exotic	Mature	Low	Good
A118	<i>Juniperus sp.</i>	Juniper	Exotic	Semi-mature		Moderate
A119	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Poor
A120	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Good
A121	<i>Juniperus communis cv.</i>	Juniper	Exotic	Mature		Poor
A122	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A123	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Good
A124	<i>Thuja occidentalis</i>	White Cedar	Exotic	Semi-mature		Moderate
A125	<i>Cestrum parqui</i>	Green Poisonberry	Exotic	Mature	Medium	Good
A126	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A127	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Good
A128	<i>Juniperus sp.</i>	Juniper	Exotic	Semi-mature		Poor
A129	<i>Prunus sp.</i>	Ornamental Blossom Tree	Exotic	Semi-mature		Moderate
A130	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A131	<i>Thuja sp.</i>	Western Red Cedar	Exotic	Mature		Moderate
A132	DEAD TREE				Low	DEAD
A133	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature	Low	Good
A134	<i>Juniperus sp.</i>	Juniper	Exotic	Semi-mature		Poor
A135	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature	Low	Good
A136	<i>Juniperus sp.</i>	Juniper	Exotic	Mature		Good
A137	<i>Cedrus atlantica 'Glauca'</i>	Blue Atlas Cedar	Exotic	Semi-mature		Moderate
A138	<i>Juniperus sp.</i>	Juniper	Exotic	Mature		Good
A139	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Semi-mature		Good
A140	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Semi-mature		Moderate

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A141	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Semi-mature		Moderate
A142	<i>Cupressus torulosa</i>	Bhutan Cypress	Exotic	Mature		Good
A143	<i>Cupressus glabra</i>	Smooth Arizona Cypress	Exotic	Mature		Poor
A144	DEAD TREE				Low	DEAD
A145	DEAD TREE				Low	DEAD
A146	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Poor
A147	<i>Juniperus sp.</i>	Juniper	Exotic	Mature		Moderate
A148	<i>Cupressus torulosa</i>	Bhutan Cypress	Exotic	Mature		Good
A149	<i>Eucalyptus sp.</i>	Gum Tree	Planted SB	Juvenile		Moderate
A150	<i>Cedrus atlantica 'Glauca'</i>	Blue Atlas Cedar	Exotic	Mature	Low	Good
A151	<i>Juniperus sabina</i>	Juniper or Cypress	Exotic	Mature		Good
A152	<i>Eucalyptus sp.</i>	Gum Tree	Planted SB	Juvenile		Good
A153	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A154	<i>Cedrus atlantica 'Glauca'</i>	Smooth Arizona Cypress	Exotic	Mature		Poor
A155	<i>Cinnamomum camphora</i>	Camphor Laurel	Exotic	Mature		Good
A156	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Good
A157	<i>Cupressus torulosa</i>	Bhutan Cypress	Exotic	Mature		Good
A158	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Semi-mature		Poor
A159	<i>Buckinghamia celsissima</i>	Ivory Curl Flower	Native	Semi-mature		Good
A160	<i>Buckinghamia celsissima</i>	Ivory Curl Flower	Native	Semi-mature		Good
A161	<i>Buckinghamia celsissima cv.</i>	Ivory Curl Flower	Native	Semi-mature		Good
A162	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A163	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature		Moderate
A164	<i>Cupressus torulosa</i>	Bhutan Cypress	Exotic	Mature		Moderate
A165	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Mature	Low	Moderate
A166	<i>Juniperus sp.</i>	Juniper	Exotic	Mature		Poor
A167	<i>Cedrus atlantica 'Glauca'</i>	Smooth Arizona Cypress	Exotic	Mature	Low	Moderate
A168	<i>Juniperus sp.</i>	Juniper	Exotic	Semi-mature		Poor
A169	<i>Chamaecyparis sp.</i>	Bookleaf Cypress	Exotic	Mature	Low	Moderate
A170	<i>Robinia pseudoacacia 'Frisia'</i>	Black Locust	Exotic	Juvenile		Good
A171	<i>Photinia glabra 'Rubens'</i>	Photinia	Exotic	Mature		Good
A172	<i>Murraya paniculata</i>	Orange Jessamine	Exotic	Mature		Moderate
A173	<i>Camellia japonica cv.</i>	Camellia	Exotic	Mature		Moderate
A174	<i>Thuja occidentalis</i>	White Cedar	Exotic	Mature		Good
A175	<i>Thuja occidentalis 'Micky'</i>	White Cedar 'Micky'	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA A		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
A176	<i>Murraya paniculata</i>	Orange Jessamina	Exotic	Mature		Moderate
A177	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Over-mature	Medium	Poor
A178	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A179	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A180	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A181	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A182	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Medium	Moderate
A183	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A184	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Over-mature	High	Poor
A185	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A186	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A187	Callistemon viminalis	Weeping Bottlebrush	Planted SB	Mature	Low	Good
A188	Pyrus calleryana	Callery Pear	Exotic	Semi-mature		Good
A189	Pyrus calleryana	Callery Pear	Exotic	Semi-mature		Good
A190	Pyrus calleryana	Callery Pear	Exotic	Semi-mature		Good
A191	Pyrus calleryana	Callery Pear	Exotic	Semi-mature		Good
A192	Pyrus calleryana	Callery Pear	Exotic	Semi-mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B1	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
B2	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Moderate
B3	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B4	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B5	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature		Good
B6	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Good
B7	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature	Low	Good
B8	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B9	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature	Low	Good
B10	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B11	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B12	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B13	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B14	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B15	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B16	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B17	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
B18	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Over-mature	Low	Poor
B19	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Good
B20	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B21	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B22	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Moderate
B23	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
B24	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B25	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B26	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B27	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B28	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B29	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B30	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Poor
B31	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B32	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature	Low	Good
B33	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Poor
B34	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B35	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B36	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B37	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Poor
B38	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B39	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B40	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature	Low	Moderate
B41	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted SB	Semi-mature		Good
B42	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted SB	Semi-mature		Poor
B43	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted SB	Semi-mature		Good
B44	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature		Moderate
B45	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature		Good
B46	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B47	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Poor
B48	<i>Eucalyptus grandis</i>	Flooded Gum	Native	Mature	Low	Good
B49	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B50	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B51	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B52	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Poor
B53	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B54	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Moderate
B55	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B56	<i>Cinnamomum camphora</i>	Camphor Laurel	Exotic	Mature		Good
B57	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature		Good
B58	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Moderate
B59	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
B60	<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	Planted SB	Mature	Low	Poor
B61	<i>Eucalyptus grandis</i>	Flooded Gum	Native	Mature	Medium	Poor
B62	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B63	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Medium	Poor
B64	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B65	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature	Medium	Poor
B66	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Semi-mature		Moderate
B67	<i>Eucalyptus cinerea</i>	Argyle Apple	Native	Mature	Medium	Poor
B68	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature	Low	Poor
B69	Dead				Low	
B70	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B71	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
B72	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
B73	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
B74	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Moderate
B75	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Medium	Poor
B76	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
B77	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
B78	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
B79	<i>Magnolia x soulangiana</i>	Magnolia	Exotic	Mature		Poor
B80	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B81	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Good
B82	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Moderate
B83	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
B84	<i>Archontophoenix sp.</i>	Palm	Native	Mature		Moderate
B85	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B86	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B87	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B88	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B89	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B90	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B91	<i>Magnolia x soulangiana</i>	Magnolia	Exotic	Mature		Good
B92	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature		Good
B93	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Moderate
B94	<i>Magnolia x soulangiana</i>	Magnolia	Exotic	Mature		Poor
B95	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
B96	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Poor
B97	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
B98	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B99	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Semi-mature		Moderate
B100	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Good
B101	<i>Archontophoenix sp.</i>	Palm	Native	Mature		Good
B102	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B103	<i>Dead Ironbark</i>				Medium	
B104	<i>Eucalyptus crebra</i>	Narrow-leafed Ironbark	Planted SB	Mature	Low	Moderate
B105	<i>Camellia sasanqua</i>	Camellia	Exotic	Semi-mature		Moderate

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B106	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Moderate
B107	<i>Camellia sasanqua</i>	Camellia	Exotic	Semi-mature		Moderate
B108	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
B109	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Semi-mature		Moderate
B110	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
B111	<i>Magnolia x soulangiana</i>	Magnolia	Exotic	Mature		Good
B112	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Poor
B113	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B114	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B115	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B116	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B117	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B118	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Medium	Moderate
B119	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Poor
B120	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Poor
B121	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
B122	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B123	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
B124	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
B125	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Medium	Poor
B126	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Low	Poor
B127	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
B128	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature		Good
B129	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature		Good
B130	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature		Good
B131	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature		Good
B132	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature		Good
B133	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Moderate
B134	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Moderate
B135	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
B136	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Poor
B137	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
B138	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Medium	Poor
B139	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature		Good
B140	<i>Phoenix canariensis hybrid</i>	Hybrid Date Palm	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B141	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Medium	Good
B142	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Medium	Moderate
B143	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
B144	<i>Eucalyptus paniculata</i>	Grey Ironbark	Planted BGHF	Mature		Good
B145	<i>Eucalyptus paniculata</i>	Grey Ironbark	Planted BGHF	Mature		Good
B146	<i>Eucalyptus paniculata</i>	Grey Ironbark	Planted BGHF	Mature		Good
B147	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Semi-mature		Good
B148	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature		Good
B149	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Good
B150	<i>Phoenix canariensis hybrid</i>	Hybrid Date Palm	Exotic	Mature		Good
B151	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Good
B152-191	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Juvenile-mature	Low	Good
B192-226	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Juvenile-mature	Low	Good
B227	<i>Eucalyptus sp.</i>	Eucalypt	Self-sown	Juvenile		Good
B228	<i>Callitris rhomboidea</i>	Port Jackson Cypress	Self-sown	Semi-mature		Good
B229	<i>Callitris rhomboidea</i>	Port Jackson Cypress	Self-sown	Semi-mature		Good
B230-250	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Juvenile-mature	Low	Good
B251	<i>Cupressus sempervirens</i>	Italian Cypress	Exotic	Mature	Low	Good
B252	<i>Casuarina cunninghamiana</i>	River Oak	Planted SB	Semi-mature		Moderate
B253	<i>Casuarina cunninghamiana</i>	River Oak	Planted SB	Semi-mature		Good
B254	<i>Casuarina cunninghamiana</i>	River Oak	Planted SB	Juvenile		Poor
B255	<i>Callitris rhomboidea</i>	Port Jackson Cypress	Planted SB	Over-mature	Low	Poor
B256	<i>Callitris rhomboidea</i>	Port Jackson Cypress	self-sown	Juvenile		Good
B257-263	<i>Casuarina cunninghamiana</i>	River Oak	Planted SB	Juvenile		Moderate
B264	<i>Casuarina cunninghamiana</i>	River Oak	Planted SB	Juvenile		Good
B265	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Moderate
B266	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
B267	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate
B268	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate
B269	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
B270	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate
B271	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Poor
B272	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate
B273	<i>Cupressus sempervirens</i>	Italian Cypress	Exotic	Mature	Low	Moderate
B274-278	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Semi-mature	Low	Moderate

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA B		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
B279	<i>Cupressus sempervirens</i>	Italian Cypress	Exotic	Mature	Low	Moderate
B280	<i>Cupressus sempervirens</i>	Italian Cypress	Exotic	Mature	Low	Moderate
B281	<i>Allocasuarina littoralis</i>	Black Sheoak	Planted SB	Mature	Low	Moderate

<p>NOTE Remaining trees on the embankment are a mixture of <i>Casuarina cunninghamiana</i> and <i>Allocasuarina littoralis</i> (68 no.) with weed species to be removed - Large-leaved Privet, Ochna, Camphor Laurel, Phoenix spp. and Jacaranda plus one dead <i>C. maculata</i> .</p>
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BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA C		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
C1	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
C2	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C3	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C4	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C5	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C6	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C7	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C8	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C9	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C10	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C11	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
C12	Dead tree					Remove
C13	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
C14	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Semi-mature		Poor
C15	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C16	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C17	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Moderate
C18	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C19	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
C20	<i>Prunus sp. (probably)</i>	Peach or Nectarine	Exotic	Mature		Good
C21	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
C22	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
C23	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature		Good
C24	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C25	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C26	Stump					
C27	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C28	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C29	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Mature		Poor
C30	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature		Moderate
C31	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
C32	<i>Rhododendron cv.</i>	Rhododendron	Exotic	Semi-mature		Moderate
C33	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Good
C34	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
C35	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA C		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
C36	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C37	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C38	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C39	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C40	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C41	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C42	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C43	Stump					
C44	Stump of <i>C.japonica</i>					
C45	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C46	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C47	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C48	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C49	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C50	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C51	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Medium	Moderate
C52	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C53	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
C54	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature	Low	Good
C55	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Medium	Moderate
C56	<i>Eucalyptus pilularis</i>	Blackbutt	Planted BGHF	Juvenile		Good
C57	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
C58	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C59	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature	Low	Moderate
C60	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
C61	<i>Malus spp.</i>	Apple	Exotic	Mature		Good
C62	<i>Eucalyptus spp.</i>			Mature	Low	Poor
C63	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
C64	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C65	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C66	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
C67	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Low	Moderate
C68	ROSACEAE	Blossom tree	Exotic	Mature		Good
C69	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C70	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA C		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
C71	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
C72	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C73	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C74	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
C75	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
C76	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
C77	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Poor
C78	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C79	<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark	Planted SB	Mature	Low	Moderate
C80	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Moderate
C81	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Moderate
C82	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Good
C83	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Poor
C84	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C85	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
C86	<i>Prunus spp.</i>	Blossom tree	Exotic	Mature		Poor
C87	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C88	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C89	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C90	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C91	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C92	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Moderate
C93	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C94	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C95	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C96	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C97	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C98	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C99	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
C100	<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark	Planted SB	Over-mature	Low	Poor
C101	<i>Eucalyptus sideroxylon</i>	Red Ironbark	Planted SB	Mature	Low	Good
C102	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Good
C103	<i>Eucalyptus tereticornis</i>	Forest Red Gum	Planted SB	Semi-mature		Good
C104	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
C105	<i>Phoenix sp.</i>	Red-fruited Date Palm	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA C		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
C106	<i>Phoenix canariensis hybrid</i>	Hybrid Date Palm	Exotic	Mature		Good
C107	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
C108	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Semi-mature		Good
C109	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
C110	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
C111	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Medium	Moderate
C112	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature	Low	Good
C113	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Good
C114	<i>Syncarpia glomulifera</i>	Turpentine	Remnant? BGHF	Mature	Low	Good
C115	<i>Syncarpia glomulifera</i>	Turpentine	Remnant? BGHF	Mature	Low	Good
C116	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C117	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C118	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C119	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
C120	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
C121	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Moderate
C122	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C123	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C124	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C125	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C126	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Poor
C127	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Poor
C128	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
C129	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C130	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C131	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Poor
C132	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C133	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C134	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature	Low	Good
C135	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C136	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C137	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Poor
C138	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C139	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C140	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA C		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
C141	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Moderate
C142	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C143	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
C144	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C145	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C146	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C147	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C148	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C149	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C150	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Good
C151	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C152	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C153	<i>Brachychiton acerifolium</i>	Illawarra Flame Tree	Planted SB	Mature		Good
C154	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Moderate
C155	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature		Good
C156	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C157	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
C158	<i>Camellia japonica</i>	Camellia	Exotic	Semi-mature		Moderate
C159	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature	Low	Good
C160	<i>Camellia japonica</i>	Camellia	Exotic	Mature		Poor
C161	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature		Good
C162	<i>Brachychiton acerifolium</i>	Illawarra Flame Tree	Planted SB	Mature		Good
C163	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Moderate
C164	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Moderate
C165	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Poor
C166	Stump					
C167	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good

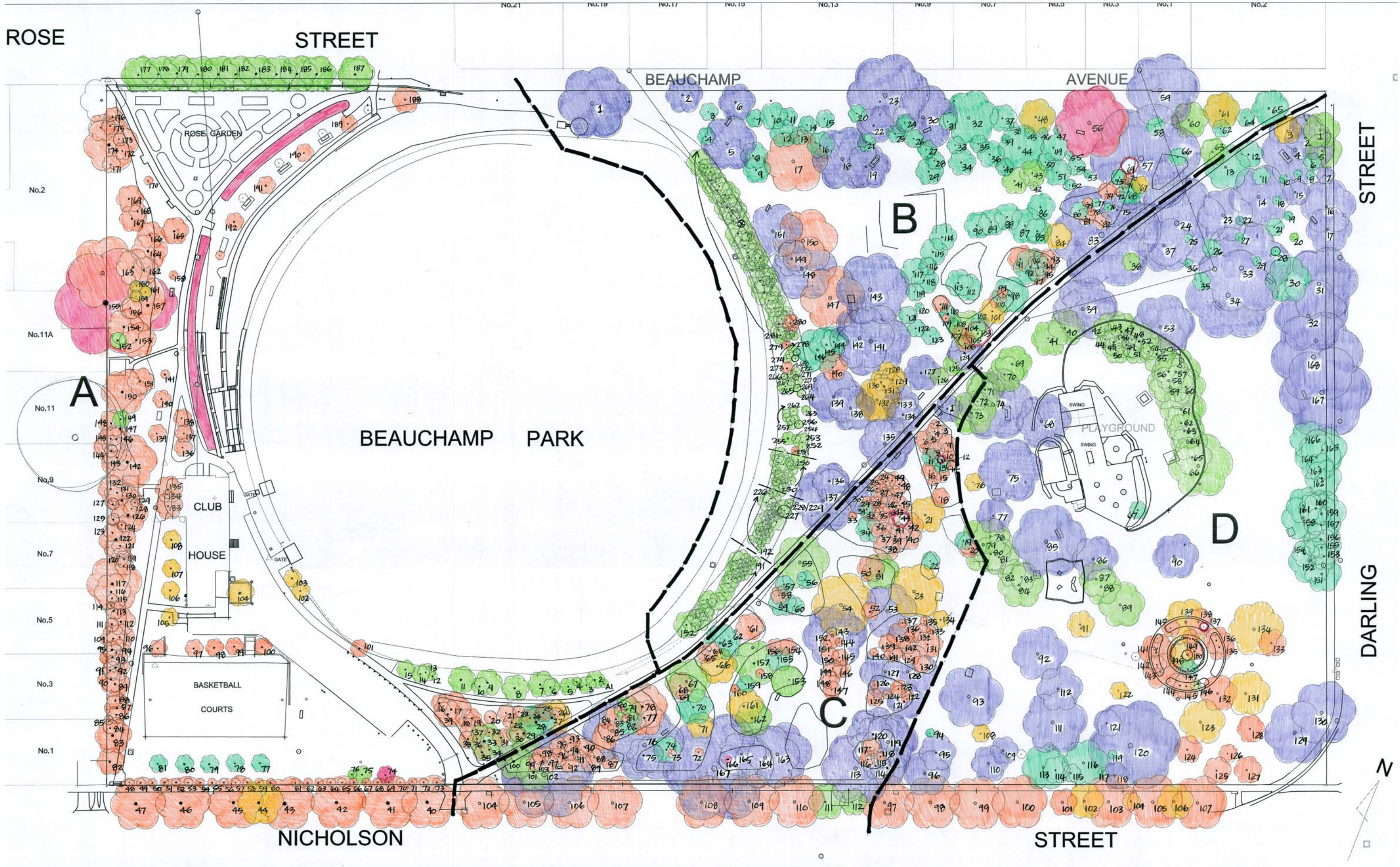
BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA D		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
D1	<i>Eucalyptus crebra</i>	Red Ironbark	Planted SB	Mature	Low	Moderate
D2	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Low	Moderate
D3	<i>Eucalyptus cinerea</i>	Argyle Apple	Native	Mature	Low	Moderate
D4	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D5	<i>Eucalyptus fibrosa</i>	Broad-leafed Red Ironbark	Planted SB	Mature	Low	Moderate
D6	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
D7	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Poor
D8	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
D9	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
D10	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Moderate
D11	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
D12	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Moderate
D13	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Mature		Moderate
D14	<i>Angophora costata</i>	Sydney Red Gum	Remnant BGHF	Mature	Medium	Moderate
D15	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature		Good
D16	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
D17	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Good
D18	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Juvenile		Good
D19	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Poor
D20	<i>Eucalyptus haemastoma</i>	Scribbly Gum	Planted SB	Juvenile		Good
D21	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Semi-mature		Moderate
D22	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Juvenile		Good
D23	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D24	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D25	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Juvenile		Good
D26	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
D27	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Juvenile		Good
D28	<i>Eucalyptus pilularis</i>	Blackbutt	Planted BGHF	Juvenile		Good
D29	<i>Eucalyptus pilularis</i>	Blackbutt	Planted BGHF	Juvenile		Good
D30	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature		Good
D31	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Medium	Poor
D32	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D33	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
D34	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D35	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA D		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
D36	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
D37	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D38	<i>Eucalyptus crebra</i>	Narrow-leafed Ironbark	Planted SB	Semi-mature	Low	Moderate
D39	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Medium	Good
D40	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D41	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D42	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Good
D43	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D44	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Good
D45	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D46	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Good
D47	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D48	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Juvenile	Low	Moderate
D49	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D50	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
D51	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Good
D52	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
D53	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
D54	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature	Low	Good
D55	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D56	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D57	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D58	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Medium	Moderate
D59	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D60	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D61	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D62	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D63	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Good
D64	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D65	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
D66	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
D67	<i>Eucalyptus pilularis</i>	Blackbutt	Planted BGHF	Juvenile	Low	Good
D68	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Good
D69	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D70	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA D		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
D71	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D72	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Semi-mature		Moderate
D73	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D74	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature		Good
D75	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
D76	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
D77	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Moderate
D78	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D79	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D80	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	High	Moderate
D81	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Medium	Moderate
D82	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D83	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Good
D84	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature		Good
D85	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate
D86	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Medium	Good
D87	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Moderate
D88	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Moderate
D89	<i>Corymbia maculata</i>	Spotted Gum	Planted SB	Mature	Low	Moderate
D90	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Good
D91	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
D92	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Moderate
D93	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
D94	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Planted BGHF	Juvenile		Good
D95	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Poor
D96	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Moderate
D97	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D98	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D99	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D100	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D101	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Juvenile		Good
D102	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature	Low	Moderate
D103	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D104	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature	Low	Moderate
D105	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA D		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
D106	<i>Eucalyptus sp.</i>	Eucalypt	Native	Mature	Low	Good
D107	<i>Phoenix canariensis</i>	Canary Island Date Palm	Exotic	Mature		Good
D108	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
D109	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Poor
D110	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Medium	Poor
D111	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Moderate
D112	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Medium	Poor
D113	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature		Good
D114	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Poor
D115	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Poor
D116	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature		Good
D117	<i>Angophora costata</i>	Sydney Red Gum	Planted BGHF	Semi-mature	Low	Poor
D118	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
D119	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Semi-mature		Good
D120	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Good
D121	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
D122	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
D123	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Semi-mature		Good
D124	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Mature		Moderate
D125	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Mature		Moderate
D126	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Semi-mature		Good
D127	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Mature		Good
D128	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Mature		Moderate
D129	<i>Eucalyptus acmenoides</i>	White Mahogany	Remnant BGHF	Mature	Low	Good
D130	<i>Eucalyptus paniculata</i>	Grey Ironbark	Remnant BGHF	Mature	Low	Good
D131	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature		Good
D132	<i>Syagrus romanzoffianum</i>	Cocos Palm	Exotic	Mature		Moderate
D133	<i>Olea africana</i>	Wild Olive	Exotic	Semi-mature		Moderate
D134	<i>Eucalyptus microcorys</i>	Tallowwood	Native	Mature		Good
D135	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Good
D136	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature	Low	Poor
D137	Dead tree					
D138	<i>Murraya paniculata</i>	Orange Jessamine	Exotic	Mature		Good
D139	<i>Pittosporum rhomboidifolium</i>	Pittosporum	Native	Mature		Good
D140	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good

BEAUCHAMP PARK TREE ASSESSMENT April 2007				AREA D		
NO.	BOTANICAL NAME	COMMON NAME	PROVENANCE	AGE	RISK	CONDITION
D141	<i>Fraxinus sp.</i>	Ash	Exotic	Mature	Low	Poor
D142	<i>Camellia sasanqua</i>	Camellia	Exotic	Mature		Moderate
D143	<i>Juniperus horizontalis cv.</i>	Juniper	Exotic	Mature		Good
D144	<i>Murraya paniculata</i>	Orange Jessamine	Exotic	Mature		Moderate
D145	<i>Pittosporum eugenoides</i> 'Variegatum'	Tarata	Exotic	Mature		Poor
D146	<i>Elaeocarpus reticulatus</i>	Blueberry Ash	Planted SB	Juvenile		Good
D147	<i>Pittosporum undulatum</i>	Mock Orange	Planted/self-seeded BGHF	Mature		Good
D148	<i>Macadamia integrifolia</i>	Macadamia	Native	Mature		Moderate
D149	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
D150	<i>Magnolia x soulangeana</i>	Magnolia	Exotic	Mature		Good
D151	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D152	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D153	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Moderate
D154	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Moderate
D155	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D156	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D157	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D158	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D159	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D160	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D161	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D162	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D163	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D164	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D165	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D166	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D167	<i>Syncarpia glomulifera</i>	Turpentine	Planted BGHF	Mature	Low	Good
D168	<i>Eucalyptus pilularis</i>	Blackbutt	Remnant BGHF	Mature	Low	Moderate



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Legend			
 Remnant BGHF	 Planted Sydney Basin	 Exotic	 Dead
 Planted BGHF	 Planted native (Australia) species	 Weed (See WCC Tree Preservation Order)	

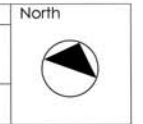
Client
 WILLOUGHBY CITY COUNCIL

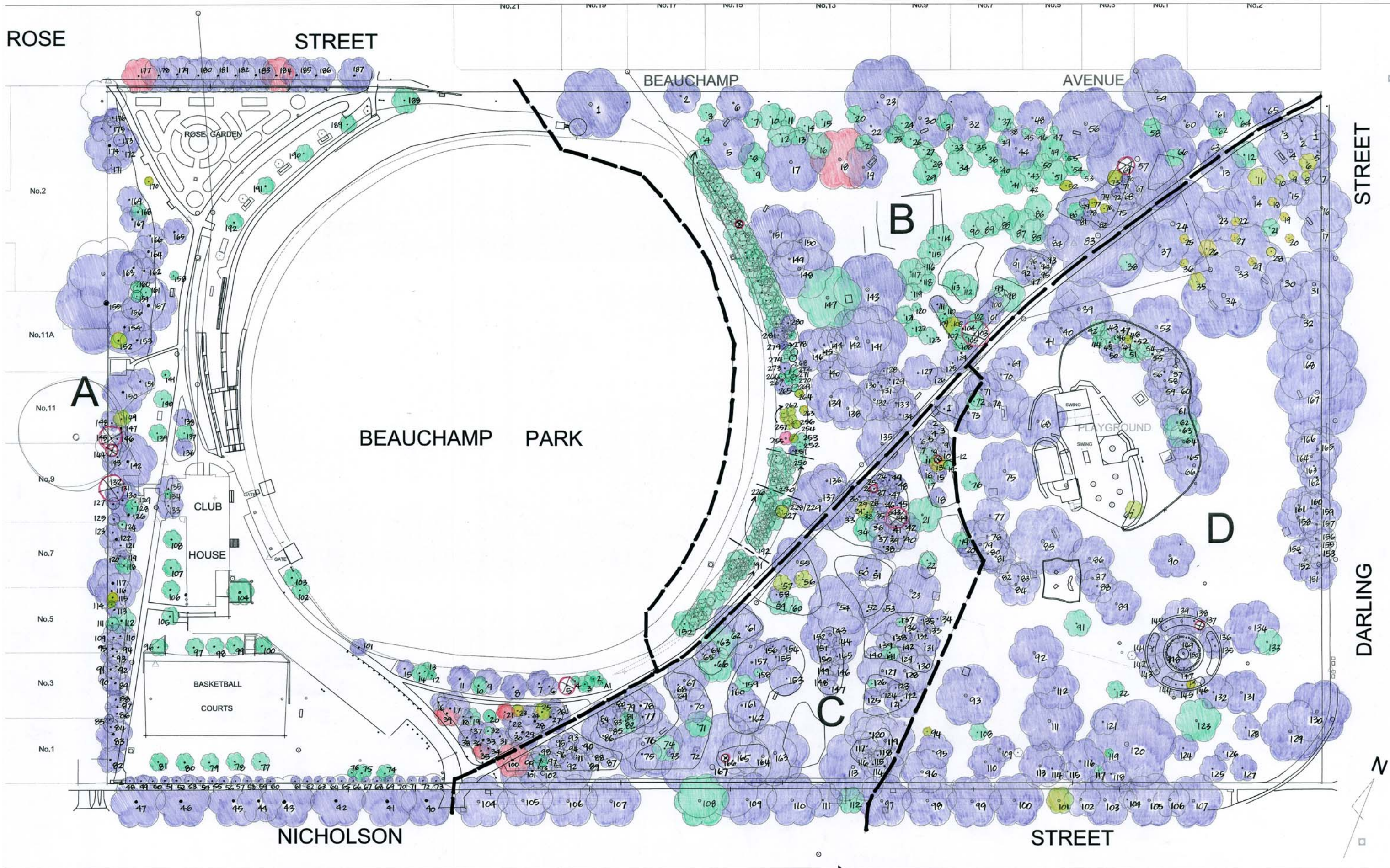
Certification
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 The horticultural components have been specified by Susan Hopley, Environmental Horticulturalist B.Sc (Environmental & Urban Horticulture).

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Project
 BEAUCHAMP PARK
 TREE ASSESSMENT

Project no.	0139	Scale	1:1000	Drawing	PROVENANCE PLAN
Date	April 2007	Scale	@A3	Drawing no.	01
Drawn	MB	Checked	AK	Issue	A
				Sheet	01





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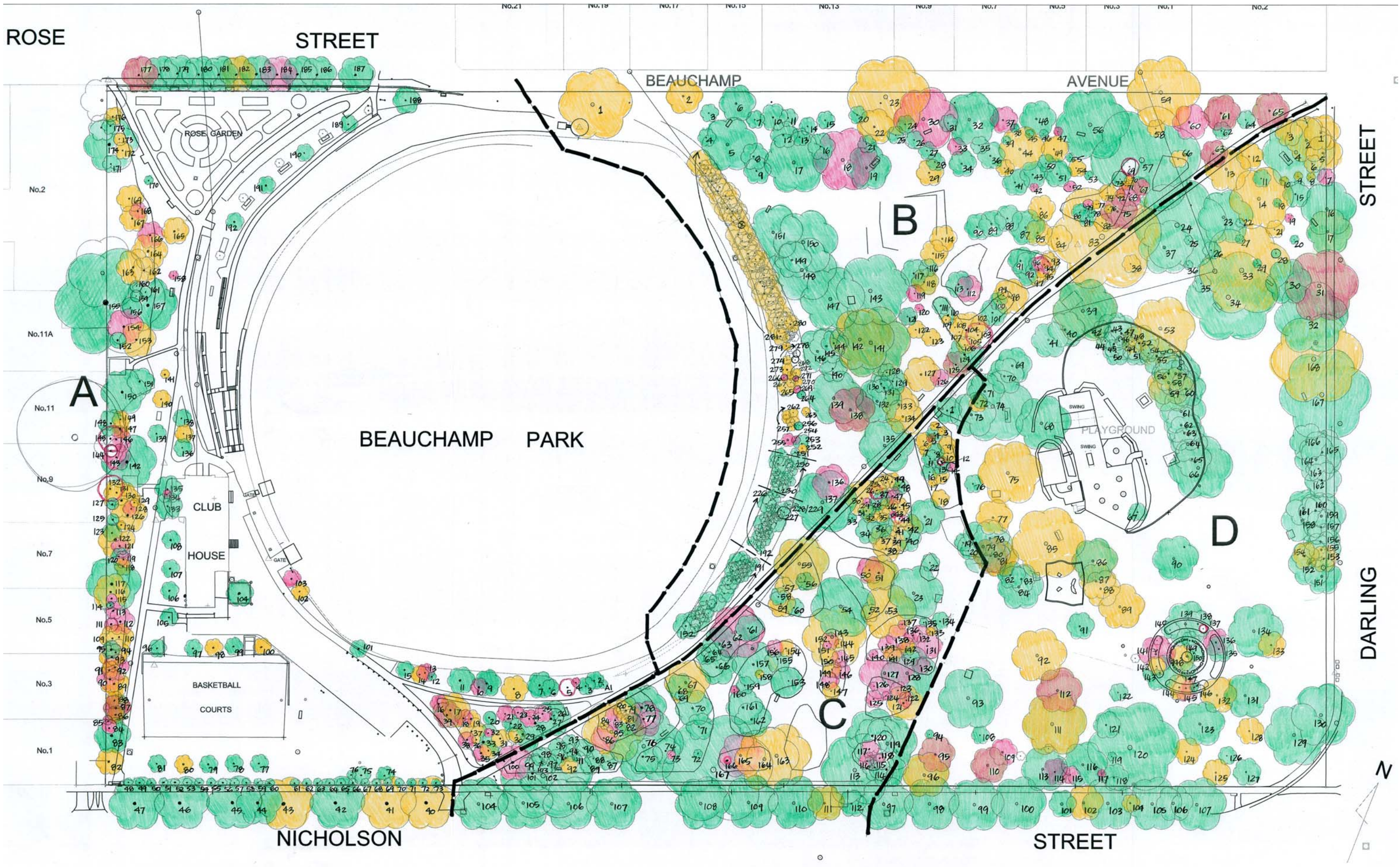
Legend	
 Juvenile	 Mature
 Semi-mature	 Over-mature
	X Dead

Client
 WILLOUGHBY CITY COUNCIL

Certification
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 The horticultural components have been specified by Susan Holey, Environmental Horticulturist B.Sc. (Environmental & Urban Horticulture).

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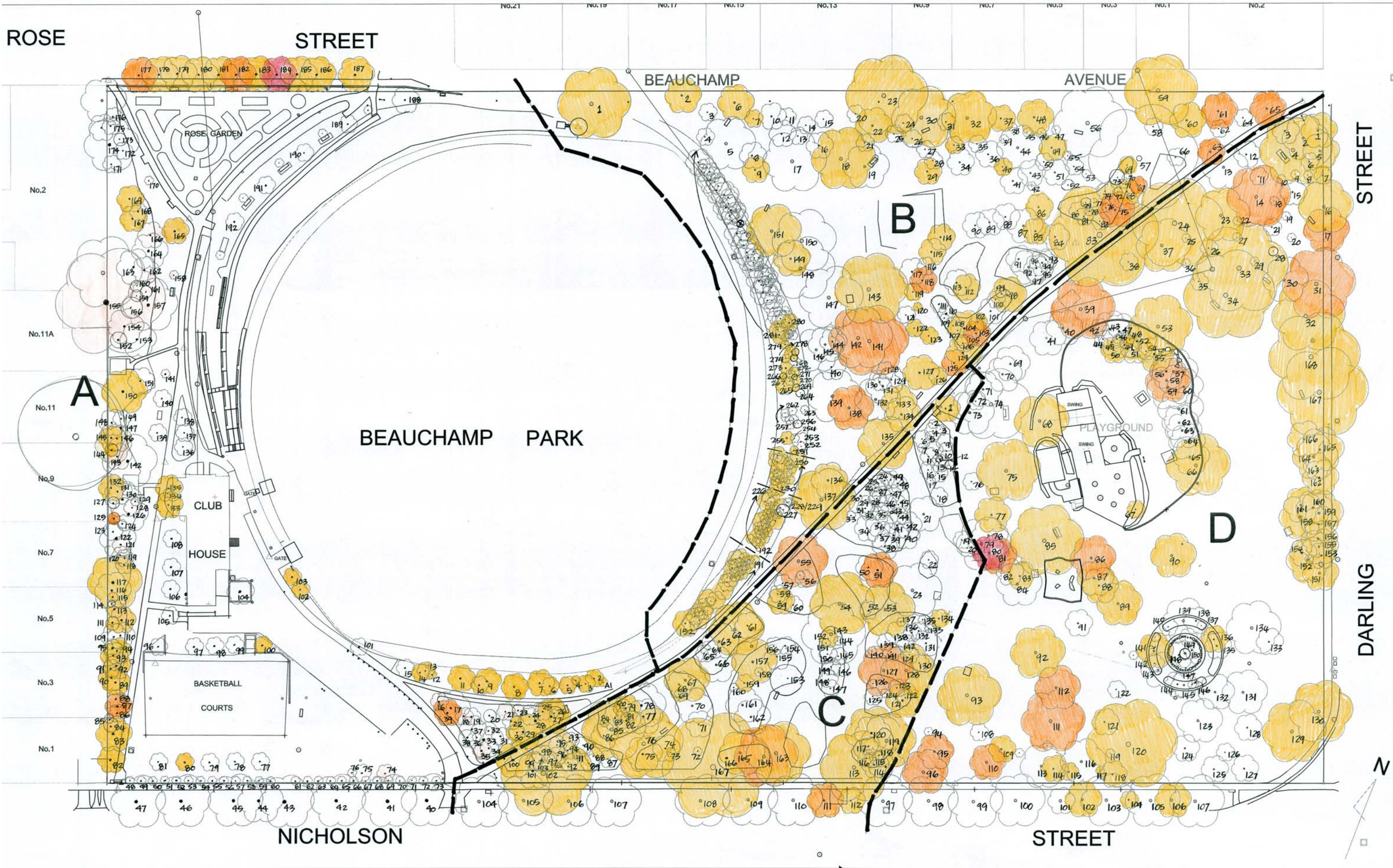
Project	Project no.	Scale	Drawing	North
BEAUCHAMP PARK TREE ASSESSMENT	0139	1:1000	AGE PLAN	
Drawn	Checked	Drawing no.	Issue	Sheet
MJB	DK	02	A	02



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Legend		
● Good	● Moderate	● Poor

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				Date April 2007	Checked 	Drawing no. 04	Issue A	Sheet 04



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Legend		
● Low	● Medium	● High

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				Date April 2007	Drawn MB	Checked SA	Drawing no. 03	Issue A	Sheet 03