Road Safety Administration Projects (All figures are Net of GST)

	Budgatad Evnanditure and s	caurres of funding			Actual Income & Expenditure	Expenditure		
	Budgeted Expelluture and sources of furnating	Soni ces or running			Account Miconic of	L'aprillation v		Balance of
	Accrued Funding Ex 96/97	Funding NZRSP	Funding City Council	Total	Revenue YTD (Jul - Feb)	Expenditure YTD (Jul - Feb)	Total YTD (Jul - Feb)	Funding Available
Unallocated Contingency Fund			\$35.756	\$35.756		-	\$0	\$35.756
Transfers From Suspense General Non Specific Project Expenditure Shared Liason Officer with Parking Unit (B/P)			\$53.238 \$2.500 \$15.000	\$53.238 \$2.500 TENTON		\$19.674	\$19.674 \$0 \$0	\$33, <u>564</u> \$2,500 \$15,000
Road Safety Co-ordinator Speeds outside schools		\$35.000	000 \$9,000 \$37,000 \$15,000	\$44.000 \$37.000 \$15.000		\$27,349 \$13,265 \$14,430	\$27,349 \$13,265 \$14,430	\$16.651 \$23.735
Child Restraint Campaign		\$10,000				\$14.425	\$14,425	\$575
Display at A&P Show		\$1\$ 000	52.000 \$2.000	\$2,000		52 056	\$2 95 6	\$2,000
Winter Driving		•					0.5	\$7,244.
Intersection safety	\$10.000						\$0 \$0	\$20,000
Urban speed campaign Alcohol Projects	-	\$10.000	000.01\$	\$20,000	(000¢)	¥.130	\$3.330	· · · · · · · ·
	\$20,000		\$5,000	\$25.000		S825	\$825	\$24,175
Sober Driving Campaign	\$2.531		\$3,000	\$17.531		\$3,935 \$3,000	\$3,933 \$3,000	08
Crash Bash	\$1,052		\$5,000 \$5.000			\$1.640	\$1,640	\$9,412
Community Alcohol Action Programme	\$37.396	35.000 s35.000				\$72.218	\$72.218	\$177
CAAP Co-ordinator	\$1,000)(\$50,000 \$50,000	\$50,000 \$50,000		\$21.074 \$5.762	\$5,762	\$44.238
Safe Routes to School			\$60.000			S30.256	\$30.256	\$29,744
Cycle Safe training	\$6.468	38	\$70,000			\$43,463	\$43,463	\$33.005
Safe with Age		• \$3.	\$3,000 \$3,000	\$3.000 \$3.000			\$0 \$0	\$3,000
Community Support			\$15,000			S386	\$386	\$14.614.
NI	\$78,447	.7 \$149.000	000 \$438,738	\$666,185	(\$600)	\$278.815	\$278.215	\$387,970

Report on seminar by Victorian Police

Two members of the Victorian Police held a seminar in Christchurch at the end of February to explain enforcement methods used in Victoria. This was part of a national tour, with most presentations being made to members of the NZ Police..

Harry Hayes, Chief Inspector Traffic Liaison Officer Operations Department, Victoria Police

Prevention of Crashes

The purpose of traffic enforcement is to prevent crashes and that Police should be familiar with the data showing where and why crashes are happening. Enforcement should concentrate on the issues where casualties will be reduced, such as speed, alcohol and restraints.

Police culture needs to change so that traffic enforcement is seen as important. There are more traffic fatalities than murders. If these figures were the other way around there would be an outcry.

Advertising in New Zealand such as the Danny and Tessa ads are excellent but their impact is reduced if they are not backed up by enforcement.

Police have limited resources. In Victoria there are never as many resources as Police would like. It is important to make the best of what you have, and use it as effectively as possible.

Consistency

One problem is a lack of consistency throughout the country and over time. There needs to be less tolerance of driving over the speed limit and the tolerance level should be consistent. There should be fewer warnings and more consistent fines. Drivers need to get the idea that they will be stopped anywhere for speeding.

In Victoria enforcement has been successful because it was

- Unremitting
- Concentrated on identified issues
- Used psychology (stealth and treachery)
- Formed a satellite around booze buses
- Monitored staff's performance

Mike Moloney, Inspector, Traffic Alcohol Section, Traffic and Operations Support Department

Trial campaigns on drink driving in the North Island have had an effect: There was a 47% reduction in night time fatal and injury crashes in Northland.

Rural Drink Drive Campaigns

The use of covert cars in country campaigns has been effective. A Police car sits outside the pub for half an hour. Everyone freaks out. The car drives away and does the same somewhere else miles away. Later a plain car comes back and sits on a side street to catch those sneaking out the back way.

The aim is to create prevention through fear of detection.

To do this you need:

- More Police exposure
- Good publicity
- Highly visible enforcement
- Credible in operation (Can't beat the system)
- Performed regularly

All these factors are vital to success.

The number of positive tests is not a measure of the success of the campaign Use of the media can add to visibility of Police campaigns. Enforcement needs to be credible and sustainable. Police need to be near pubs every Friday and Saturday night. To be consistent drivers must be prevented from avoiding the test site. All drivers should be screened without exception. A balance is needed between use of covert and overt enforcement.

Urban Areas

Patterns are different in urban and rural areas. People drink on more nights of the week in urban areas. Enforcement must be spread over the whole city to give the impression that drivers are likely to be stopped anywhere.

Summary

- The perception of the likelihood of detection of speeding and drink driving has to be enhanced. This is enforcement through psychology.
- Advertising changes public attitudes allowing higher levels of enforcement.
- Experience and research indicates that this approach works.

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Project Management & Property Services

PO Box 732 Christchurch Tel 366 3288 Fax 355 9634

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6 March 1998

Liquid Waste Management Christchurch City Council PO Box 237 CHRISTCHURCH 1

Attention:

Mr N Stewart

Liquid Waste Manager

Dear Sir,

RE:

WAIMAKARIRI EMPLOYMENT PARK
SEWERAGE CONNECTION TO KAINGA PUMPSTATION

Description of Employment Park Proposal.

Waimakariri Employment Park consists of about 45 ha of land, of which 30 ha will be developed for the purpose of providing a motorway service centre and a range of wholesale, commercial, light industrial, retail and business activities. A more detailed description of the proposal is included in the Waimakariri Employment Park, Assessment of Effects on the Environment (Section IV) report attached to this letter.

Types of industry and Sewage Quality and Quantity

It is intended that the type of industry in the park be limited to those that do not produce large amounts of difficult to treat waste. To ensure this, standards for permitted and controlled activities have been included in the proposed plan change document (Application for Change to the Eyre County Plan Section of the Waimakariri Transitional District Plan). Those that are relevant to sewage and the type of industry are (see attached extracts):

- 10.2.4 Standards for Permitted and Controlled Activities, (Clause x page 13) which restricts permitted discharges to sewer to equivalent to 30m3/ha/day and quality not significantly different from the quality of normal domestic sewage.
- 10.2.4 Standards for Permitted and Controlled Activities, (Clause xvii, ii page 16) which limits the types of activities that may take place in the motorway service area.

- 10.2.8 Non Complying Activities, (Clause ii page 17) which lists a number of activities that produce offensive wastes as non-complying activities.
- 10.2.9 Assessment Matters, (Clause x Sewage Output Page 23) defines the sewage related factors to be considered when assessing a resource consent.

It is considered that these rules will adequately control the type and quality of sewage produced so that it will not be dissimilar to that produced from a residential subdivision. On the basis of these controls it is estimated that the maximum wet weather sewage flow from the development will be less than 16 l/s and that the average daily flow will be about 280 m3/day.

Choice of Discharge to Christchurch City Council Sewer.

In considering the options for discharge of sewage a number of options were considered. These included:

- discharge to the Kaiapoi sewerage system,
- discharge directly to the Kaiapoi Sewage Works via an independent pipeline,
- treat on site and discharge treated effluent directly to land or the Waimakariri River, and
- discharge to the Christchurch City Council (CCC) sewerage system at Kainga.

The options involving discharge to the Kaiapoi sewerage system were pursued first as being the most logical options. Discussions with Waimakariri District Council (WDC) staff revealed that the southern portion of the reticulation system into which the system was seeking to connect is presently overloaded during the winter months and would not be able to accept the additional flow unless a major upgrade of the reticulation system was undertaken. Investigations into this upgrading are presently underway but the WDC was unable to provide assurances as to when the upgrade will be completed. In addition to the reticulation capacity problem the wetland disposal system at the Kaiapoi Sewage Works also experiences capacity problems during wet periods. This results in overflows to the Waimakariri River at times. In the light of these problems it was decided that discharge to the Kaiapoi sewerage system was not practical or environmentally suitable.

The option of on-site treatment and land disposal was rejected as, due to the high water table in the area in winter, no suitable land for year round land disposal could be found. The option of disposal to the Waimakariri River was not considered to be environmentally suitable and consent would be extremely difficult if not impossible to obtain.

The option of disposal to the CCC sewerage system at Kainga was chosen as the most suitable option from both a technical and environmental perspective. This option also has the additional advantage in that the discharge of sewage from the development to Kainga can assist in solving odour related problems related to the reticulation system through Kainga being under utilised. The increased flow from the development will reduce the residence time for sewage flows from Kainga and thereby reduce the chances of odours being produced in the pipeline.

Odour Control Measures

To ensure that the sewage being discharged to Kainga will always be fresh so odour problems are not experienced it is proposed that the following control measures will be included in the system. These measures will ensure that sewage arriving at Kainga is never more than four hours old.

- The pump sump at the development will be sized such that each pump cycle will completely replace the volume within the delivery main to Kainga.
- A freshwater tank will be situated next to the sewage sump. If, after the set time, the sump has not yet filled to the level at which the pump activates, a valve on the freshwater tank outlet will be opened and the sewage sump rapidly filled to the level at which the pump automatically starts. The valve from the freshwater sump will then close allowing the tank to refill before the end of the next time limit.
- The pumping rate, pipeline size, pump sump volume and time limit for the sump filling with freshwater will be designed so that the sum of the travel time in the gravity reticulation, plus maximum time to fill the sump, plus pumping time to Kainga, plus residence time in the pipeline between pumping will be less than four hours. Preliminary calculations show that this can be achieved with the following specifications:

	3.0 km
1	25 mm
	16 l/s
	18 m3
	50 min
	1

This will activate the following travel time to Kainga:

Travel time in gravity system	30 min
Time to fill sump	50 min (max)
Pumping time	2 x 20 min
Standing time in pipeline	2 x 50 min (max)
Total	3 hr 20 min (max)

This will ensure that at all times sewage will be less than four hours old when it reaches Kainga. In addition to this during the night when odour problems in the present Kainga system are most likely to occur the system will receive flushes of very dilute sewage for 20 minutes out of every 70 minutes. This should ensure that sewage originating from Kainga is flushed through the system reducing the residence time in the system and assisting the abatement of odours.

Additional Benefit to Christchurch City Council

A further benefit to the residents in the Kainga area is achieved through the ability of residents on the southern side of the Waimakariri Bridge, currently serviced by private on-site septic systems, to connect to the line. This will eliminate both odour and environmental concerns associated with this method of disposal.

We feel that the information given in this letter adequately addresses the concerns raised by your department and we therefore request that formal approval to connect to the Kainga sewerage pumping station be granted.

Yours faithfully PROJECT CONSULTING LTD

R.M.BERREY

emp013

except that this standard shall not apply to:

- signs and structures associated with, and necessary for, the construction of roads and vehicle access, parking and manoeuvring areas, provided that the structures do not extend more than 150mm above the levels shown on the cross-section of the "Floodways" contained in Appendix Q; and
- structures erected for the purpose of noise attenuation, which run parallel to the direction of the "Floodways" and do not exceed 1m in width.
- The areas shown as "Floodway" on the Outline Development Plan shall not be used for the storage of any goods or materials, other than for the storage and parking of motor vehicles and motorised equipment which can be moved under their own propulsion.
- d The finished level of any land within the areas shown as "Floodway" on the Outline Development Plan shall not extend above the levels shown in the cross-section of the "Floodways" included in Appendix Q.
- e Within the areas shown as "Floodway" on the Outline Development Plan, landscape plantings shall be limited to grass and individual trees with single trunks kept free of branches to a height of 1m above ground level and planted no closer than 5m between the centres of the tree trunks. No shrubs or bushes shall be planted.

(x) Sewage Output

- a No activity shall result in the output of sewage from any site which:
 - i. exceeds an equivalent discharge volume of 30m³/ha/day; or
 - ii. has a quality significantly different from the quality of normal domestic sewage.

(xi) Stormwater Management

- On every site, all stormwater from roofs and areas of hardsurfacing shall be collected and discharged to kerb edge channels or to an underground reticulated stormwater drainage system.
- All stormwater collected from any service station forecourt and/or truck stop area within the Motorway Service Area shall be passed through an oil-water separator with an isolator shut-off valve before discharging from the site.

- ii. Activities within the area shown as Motorway Service Area shall be limited to the following:
 - service stations
 - truck stops
 - truckers accommodation and rest facilities
 - restaurants, take-away food outlets and refreshment facilities
 - produce retail facilities for the sale of agricultural, horticultural or other farm and/or garden produce grown or produced predominantly in Canterbury
 - retail sale of food, groceries, stationery, gifts and toilet requisites from a floor area not exceeding 150m²
 - facilities and premises for the provision of information for travellers and tourists
 - rest and picnic areas and facilities, public toilets, showers and laundry facilities, telephones, postal/fax and banking facilities
 - vehicle parking and storage areas
 - vehicle-wash facilities
 - emergency and transport-related regulatory services
 - iii. No buildings shall be located with the areas shown as lakes, and activities within these areas shall be limited to activities on the surface of the water.
- b No activities shall commence operating within the zone until such time as the lakes are constructed in general accordance the provisions of the Outline Development Plan.

10.2.5Controlled Activities

The following activities shall be Controlled Activities, provided that they also comply with the Standards specified under 10.2.4 above:

- (i) Buildings on sites outside of the Motorway Service Area, which adjoin the reserve shown on the Outline Development Plan to be set aside along the boundary of the zone with the Northern Motorway (in accordance with Ordinance 12.7A(b)(xi)), with respect to:
 - a. the visual appearance of the buildings as viewed from the Northern Motorway; and
 - b. the nature and visual appearance of the planting and landscape development of the land between the reserve along the Northern Motorway and "Building Line" shown on the Outline Development Plan.

- (ii) Activities within the Motorway Service Area, with respect to:
 - a. the design and appearance of the buildings and other activities on the site;
 - b. landscape design and site layout;
 - c. the location and design of vehicular access to, from and within the site;
 - d. the placement and effects of on-site lighting;
 - e. the means of mitigation of noise effects as a result of activities on the site;
 - f. parking design and location;
 - g. the scale, placement and design of signs.

10.2.6Discretionary Activities

The following activities shall be Discretionary Activities:

(i) Any activity, which does not comply with one or more of the Standards specified under 10.2.4 above, and which is not specified as a Non-Complying Activity.

10.2.7 Standards Relating to Discretionary Activities

The standards for discretionary activities shall be set by the Council, having regard to the circumstances of the application, the policies contained in the District Plan, and the assessment matters specified in 10.2.9 below.

10.2.8 Non-Complying Activities

The following activities shall be non-complying activities:

- (i) Residential Buildings, other than for use by the owner, operator and/or caretaker of other activities being undertaken on the site where the residential activity is incidental to and forms part of an activity being undertaken on the site.
- (ii) Any of the following potentially offensive activities:
 - Processes requiring offensive trade licenses under the Health Act 1956.
 - The manufacture and processing of chemical fertilisers.
 - The slaughtering of animals and the processing of meat and meat byproducts or co-products, including rendering, fellmongery, tanning, casing and pelt processing and any associated chilling, freezing, packaging and storage of meat and associated products;
 - Fish curing, cleaning, treatment, preserving and storage.
 - Cement and concrete products manufacture.

- Hot-mix asphalt paving manufacture.
- Glass or fibre-glass manufacture.
- Wood-pulp manufacture and processing.
- Foundry processes, electro-plating works, melting of metals, steel manufacture and galvanising.
- Natural gas, oil or petroleum distillation or refining.
- Manufacture of hardboard, chipboard or particle board.
- Timber treatment.
- · Wool scouring.
- Auto dismantling.

(iii) The following Retail Activities:

- a Supermarkets.
- Retail activities, which do not fall within the definition of "Large-scale retail facilities" (refer to General Ordinance on Interpretation); except for the following which are not non-complying activities:
 - i The following activities within the Motorway Service Area:
 - service stations
 - truck stops
 - retail facilities for the sale of agricultural, horticultural or other farm and/or garden produce grown or produced predominantly in Canterbury
 - retail sale of food, groceries, stationery, gifts and toilet requisites from a floor area not exceeding 150m².
 - ii The retail sale and display of:
 - goods produced or processed on the site,
 - ancillary products to goods produced or processed on the site, or
 - ancillary products to the provision of services on the site.
 - iii Restaurants, take-away food outlets and other refreshment facilities.
 - Outdoor sales and display of goods, together with associated indoor retail display and sales within a building located on the same site as the outdoor display and sales, provided that the building does not occupy more than 20% of the area of the site.
- (iv) Factory Farming.

- Any available information regarding flooding and ponding levels, and frequency of flooding events, in relation to the site of the building.
- The quality of assets that will be vulnerable to flooding, as a result of the erection of the proposed building.
- The effect of development in the "Floodway" on the ability of floodwaters to pass through the zone and any consequent effect of obstructions in the floodway on the likely inundation levels on adjoining properties.

(x) Sewage Output

- The capacity, availability, and accessibility of the public reticulated system to serve the proposed activity;
- Whether the sewage reticulation, treatment and disposal system, to which the outfall will be connected, has sufficient capacity to service the activity, and if not, whether the consent holder should contribute towards the upgrading of the system;
- Whether the quality of the sewage output from the activity can be accommodated by the sewage reticulation, treatment and disposal system and whether there is a need for on-site sewage treatment prior to discharge to the public reticulation system.

(xi) Stormwater Management

- The adequacy of the proposed means of disposing of collected stormwater from the roofs of all buildings and impermeable surfaces, in terms of stormwater retention and quality;
- The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas and of siltation;
- The effects of the proposed means of stormwater disposal on the water quality and stream flows in the Kaikainui and Courtenay Streams.

(xii) Protection of the Kaikainui Stream

 The degree to which the activity threatens indigenous plants or animals or their habitat identified in the waterway bed and margin;

Section IV The Development Proposal

4. THE DEVELOPMENT PROPOSAL

4.1 DEVELOPMENT PHILOSOPHY

The population of the Waimakariri District is increasing rapidly and it is anticipated that this will continue for at least the next twenty-five years. Statistics New Zealand predictions for population growth within the Waimakariri District are for a population of 46,000 by the year 2016. The Waimakariri District Council itself is anticipating an even greater population increase to 53,000 by this time.

1996 census data indicates that only 54% of the workforce accommodated within the Waimakariri District is employed within the Waimakariri District. The effects of this on transport patterns, energy consumption, air pollution and social cohesion are significant.

The aim of this plan change is to provide opportunities for the Waimakariri District to employ more of its population.

Outline Development Plan

The Outline Development Plan included in the Plan Change Application is attached as Figure 1.

The development plan provides for approximately 30ha of developable area with the remaining 15ha utilised by roading, reserves and lake area.

Motorway Service Area

WAIMAKARIRI EMPLOYMENT PARK Assessment of Effects on the Environment

The development plan provides for a 5ha Motorway Service Area ("MSA") which is intended to comprise:

- fuel sales
- takeaway restaurant
- crescent of 10-12 retail shops serving the travelling public
- toilet/shower facilities
- boat/campervan parking
- portable toilet emptying facilities
- fresh water filling
- truck parking

Travellers Accommodation

In association with the MSA, the proposed change provides for travellers accommodation which will provide motel style facilities for the travelling public.

Multiplex Cinema Complex

The rules for the proposed Zone provide the opportunity for a 2ha multiplex entertainment facility. A site of this size would accommodate two 120 seat theatres and two 80 seat theatres.

Balance of the Zone

The balance of the Zone will be developed as an employment park comprising a range of wholesaling, commercial, light industrial, retailing and business activities.

The development of a wider range of employment and business enterprises in the District is seen as important in reducing the dependence of the District on people commuting to Christchurch City each day for work and for their commercial and entertainment needs. It will assist in ensuring the long-term sustainability of the District as an attractive and efficient place to live and work.

The area is zoned as District Employment Zone and development within the zone will proceed in general accordance with an Outline Development Plan included in the District Plan. The zone sets aside an area of approximately 5ha for a Motorway Service Area enabling the establishment of a range of activities servicing the travelling public and the road transport industry. The balance of the zone is available for the development of a wide variety of light industrial, commercial and other employment-generating activities.

Roading and Access

Access to the zone is to be directly from the Northern Motorway by way of new on- and off-ramps on the western lane of the motorway. Access is also to be provided from Tram Road, with access from the Motorway to Tram road being improved by the construction of a south-bound off-ramp and the widening of the Tram Road overbridge. The internal roading layout for the zone is to be generally in accordance with the road layout in the Outline Development Plan. This requires a main avenue connecting Tram Road with the new Motorway on- and off- ramps, as well as a ring of Distributor roads, which have the additional function of providing flood-ways through the zone.

The District Employment Zone provides for a very wide range of activities, in order to provide ample opportunity for employment-generating activities to establish in the District. Polluting and potentially offensive industrial activities are restricted from establishing in the zone, in order to protect the character and amenity values within the employment park and to protect the surrounding area

from adverse effects from such activities. Activities that need to dispose of large quantities of sewage effluent cannot be accommodated in the zone, due to limitations on the capacity of the sewage reticulation system through Christchurch City. Residential use of the zone is limited to owners, operators and caretakers of other activities in the zone, in order to avoid potential conflicts between residents and the effects of the light industrial and commercial activities being undertaken in the zone.

Retailers

The scale of retailing permitted in the zone is generally limited to very large-scale retail outlets, outdoor retail sales, and the sale of goods ancillary to other activities on the site. This is intended to avoid adverse effects on the functioning, vitality and convenience of the town centres of Kaiapoi and Rangiora, where such activities would be unlikely to establish or would not be compatible with the built environment sought in these town centres. The range of activities permitted in the Motorway Service Area is limited to activities serving travellers and the transport industry, in order to ensure that other activities do not establish in a way that adversely effects the safe and efficient operation of this area. Other activities which are restricted include factory farming, forestry and quarrying, the effects of which are not considered to be compatible with the character and amenity values anticpated in the zone.

Standards

The standards for permitted and controlled activities within the zone are intended to enable a wide range of employment-generating business activities to develop and function in an urban-scale environment, whilst ensuring that the amenity values and environmental quality of the surrounding rural area are not adversely affected. The standards for this zone give considerable flexibility in

WAIMAKARIRI EMPLOYMENT PARK Assessment of Effects on the Environment

the design and arrangement of buildings and in the types of activities that can be undertaken. Limitations are generally related to effects on:

- the visual amenity of the main avenue and distributor roads through the zone,
- the general coherence, tidiness, and safe and efficient operation of activities in the zone,
- the effective functioning of the flood routes through the zone,
- the natural character and values of the Kaikainui Stream,
- the water quality and functioning of the Courtenay Stream,
- the safe and efficient operation of Christchurch International Airport, and
- the visual and general amenity values of the surrounding roads and rural area.

The zone is located within a rural area, with views into the zone from the Northern Motorway and Tram Road. The performance standards have been designed to minimise the effects of building development within the zone on views from these roads and from adjoining properties.

The zone is located under the approach path to the main runway of Christchurch International Airport and activities in the zone can expect some noise from aircraft approaching the airport during southerly wind conditions. Standards have been included for insulation of noise-sensitive activities in the part of the zone most likely to be affected by this noise. Use of low reflective finishes on roofs within the zone is also a requirement to avoid development within the zone causing distractions to aircraft approaching the airport.

The zone is potentially in the floodpath of a major breakout from the Waimakariri River. The performance standards for the zone have been designed to avoid adverse effects to activities within and outside the zone, as a result of floodwaters passing through the zone. Floor levels of buildings are required to be above the height of the probable maximum flood, as are areas where hazardous substances are likely to be stored or used. Wide flood paths are to be retained through the zone, which will allow the passage of floodwaters, alleviating any potential increase in the height of floodwaters on adjoining properties as a result of the development of the zone.

Activities in the zone are to be provided with fully reticulated urban-standard services. These include a reticulated water supply for potable water, irrigation and fire-fighting. Sewage effluent is to be reticulated to the Christchurch City sewage treatment and disposal system. Stormwater collection and disposal is to be fully reticulated to a system of swales and ponds, with associated litter traps and oil-water interceptors to ensure adequate treatment and retention of stormwater before it is discharged to the Courtenay Stream. This will ensure the protection of the water quality and ecological values of that stream and that the rate of stormwater discharge is not increased over that currently experienced from the site. Stormwater is not to be discharged to the Kaikainui Stream. The natural character and conservation values of this stream is to be significantly enhanced through the setting aside of a densely planted reserve along its margins. Public access is to be provided for along the margin of the Kaikainui Stream.

4.2 SITE SELECTION

The site was chosen for its strategic location within the fast growing Waimakariri District. The site is 13km north of central Christchurch and 15 minutes from Christchurch International Airport making it an attractive base for a wide range of business activities. A Business Locational Analysis carried out by McDermott Fairgray has been used to assess the attribute ranking of the site. The results of this analysis are shown in Table 21.

Table 21
Business Locational Analysis

Business Lo	ocational Analysis
Attribute	Score
Proximity to:	
Port Arterial Road Rail Airport Local Physical Amenity Suppliers Workforce Residence Services for Workforce Related Activities Public Transport Regional CBD Subregional Centre	-3 3 2 2 2 -1 2 -1 -1 -1 -1 -1 2
Location of MD Consumer Population Business Population Primary Producers	-1 2 -1 3
Site Values: Aspect/View/Profile Distance from Competition	1.5

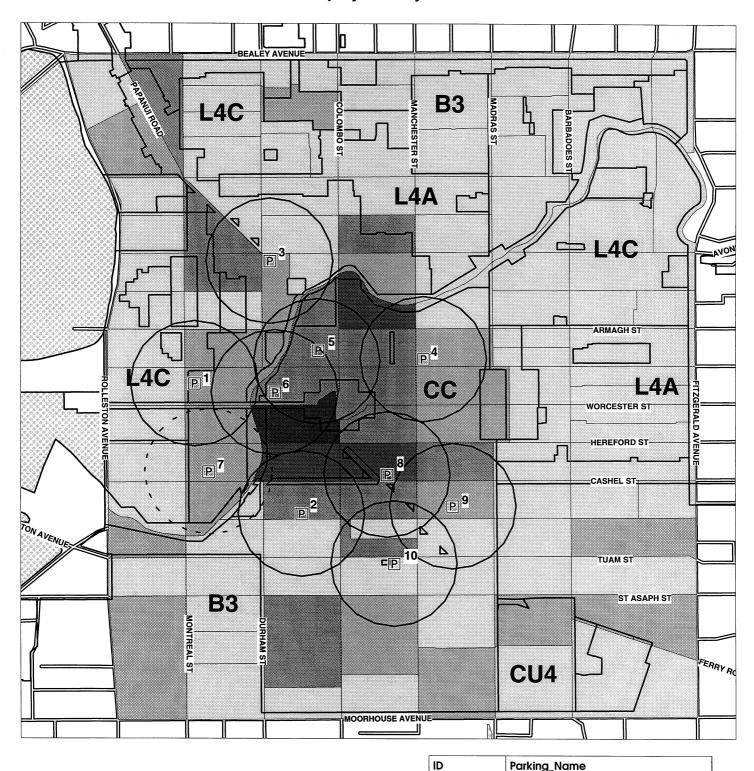
WAIMAKARIRI EMPLOYMENT PARK Assessment of Effects on the Environment

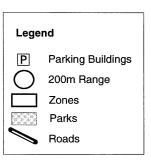
Locational requirements differ across business activities therefore the levels of importance placed on each of these characteristics will differ. For example, companies reliant on an air freight operation will treat proximity to Christchurch airport as highly desirable. By matching the attribute listing to business sectors, a list of the most likely industries to be attracted to the site can be developed. From this, the suitability of the site for development has been determined.

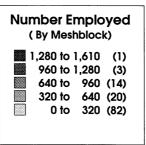
Proximity To Off Street Public Parking Facilities

200m Range from public parking sites (Casual walking distance)

Total Employment By Meshblock







1	New Art Gallery
2	Lichfield St
3	Kilmore St/Parkroyal
4	Manchester St
5	Farmers
6	Oxford Tce/Noahs
7	King Edward Barracks (Private)
8	Cashel St (Private)
9	Bedford Row (Private)
10	Tuam St

Source:Statistics New Zealand, 1996 Census of Population and Dwellings Prepared by Environmental Policy and Planning Unit, CCC, March 1998

CHRISTCHURCH CITY COUNCIL

CITY ART GALLERY
PROJECT

Parking Assessment Study

Final Report

March 1998



TRAFFIC DESIGN GROUP

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CHRISTCHURCH CITY COUNCIL

CITY ART GALLERY PROJECT

Parking Assessment Study
Final Report



16-850-3411 12 March 1998

TRAFFIC DESIGN GROUP

Mr Stuart Woods Senior Transport Planner Environmental Policy and Planning Unit Christchurch City Council PO Box 237 CHRISTCHURCH

COPY VIA FAX 0-3-371 1789

Dear Sir

CITY ART GALLERY REDEVELOPMENT Parking Assessment Study

We are pleased to provide the following final parking assessment report detailing the potential effects of parking changes associated with development of the former Sheraton Hotel site in Montreal Street as a new City Art Gallery. A series of detailed surveys of the current kerbside parking and Gallery visitor patterns has established a sound basis of technical data that together with the Council's own parking data and estimates of the new Gallery parking needs prepared by both ourselves and other advisers from within the Gallery development team, provide the framework from which this assessment has been advanced.

The study found that if no other new public parking facilities are to be established in the vicinity of the Art Gallery, then some 365 off-street parking spaces should be pursued within the site to meet the demands of the Gallery itself and to support the vibrant and successful range of activities in the surrounding area. Not replacing the existing parking on-site which caters for the needs of casual parking associated with the adjacent Cultural Precinct in particular, all-day parking for city workers and reserved parking, will lead to both reductions in the attractiveness of the Precinct as well as to increasing the spread of commuter parking into surrounding neighbourhoods.

The main conclusion drawn from this assessment is that with the new Farmers and Hospital carparks it would not be necessary for the Gallery to replace all the existing public carparking spaces on the site and that about 265 spaces would represent the practical total demand. There is a need to accommodate the parking with a cost effective construction and alternatives are probably represented by either one or two full levels of parking. Two full levels would provide some 400-450 spaces which would be an excessive provision bearing in mind the incremental cost of the second basement. Accordingly a single level with some 210 spaces is recommended.

If however the developers of the Postal Centre or other adjacent properties are able to provide a suitable number and type of casual or dedicated parking spaces, then it may be appropriate for the Gallery to provide fewer spaces. At this stage there are no such developments approved and therefore it is recommended that the Council should continue to plan for provision of at least one full level of parking within the Gallery site.

We look forward to your consideration of this report and would be happy to discuss any of the matters raised in the report with you.

Yours faithfully

TRAFFIC DESIGN GROUP LTD

A T Penny **DESIGN DIRECTOR**

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EXECUTIVE SUMMARY

This report was commissioned by the City Council's Environmental Policy and Planning Unit to assess the parking demand forecasts for the new City Art Gallery and to provide a recommendation as to the future provision of on-site parking within the new Gallery site. The Gallery is planned to provide a total of some 4000m² of public space on the former Sheraton hotel site in Montreal Street The existing site provides 190 casual parking spaces and 75 reserved long term parking spaces.

The assessment has been prepared using the results from a comprehensive survey of kerbside parking within the Central City undertaken by the Council in 1994, information on the parking occupancy levels and patterns at the Council's parking buildings and updated surveys of local parking patterns along kerbside areas close to the site undertaken in January 1998. Data and estimates of visitor and attendance patterns at the Gallery, the Canterbury Museum, Court Theatre and Arts Centre have been collated so as to assess the various visitor parking demands in the vicinity of the new Gallery.

The key findings of this assessment are:

- existing kerbside parking patterns within the vicinity of the Gallery site typically involve almost complete occupancy of both unrestricted all-day parking and the various time limited parking areas during most weekdays, many weekday evenings and weekends
- the busiest periods of parking activity correspond to both individual eventrelated parking as well as the overlapping of parking demands from the variety of events regularly held in the vicinity
- visitors who park within the kerbside areas in the vicinity of the proposed Gallery generally adopt locations where the walking distances between car and destination are minimised. Interviews of existing Gallery visitors show that walking distances of less than 250m are generally adopted for this site. For the purpose of investigating the future parking behaviour of visitors to the new Gallery this limit of a 250m convenient walking distance has been retained. It is noted that our own company's studies of retail centre walking distances have revealed a strong reluctance of shoppers to walk more than 150m to their destination.
- reference to other public exhibition and special event studies show that unless high quality and regular schedules of public transport services are available then utilisation of public transport by Gallery visitors is not expected to be significant
- the estimates of the new Gallery visitor pattern show that there will typically be weekly events attracting about 180 – 250 people which would generate parking demands of around 100 parking spaces. Other less regular events at monthly and two-monthly intervals are expected to attract between 300 and

- as many as 800 to 1000 visitors to the Gallery and have peak parking demands of between 150 and 450 parking spaces.
- the peak weekly parking demand level of up to approximately 100 spaces has been adopted as a desirable demand level for functional design purposes.
- the existing 265 parking spaces within the proposed Gallery site are vital to the success and attraction of the Cultural Precinct and are a useful asset for other activities in the area.
- if there were no other parking proposals affecting the area, it would be essential to replace the existing parking and to provide additional parking for the Gallery (i.e. 365 spaces)
- the City Plan requires just 45 carparks spaces and 45 cycle spaces for developments of this scale in the Central City Western Fringe zone. In other zones, an Art Gallery of the size proposed would require provision of 133 visitor carparks, 13 staff carparks and 13 cycle spaces
- the development of the Farmers and Hospital parking buildings will not directly provide parking facilities for Gallery visitors because the walking distances would be in excess of 500m. These facilities will however provide a useful strategic benefit to the CBD parking supply and will contribute to a reduction in weekday parking demand within the vicinity of the Art Gallery site by allowing a flow-on effect, for example the Farmers facility will reduce demand at Noahs, which will then have spare capacity for some of the demand currently satisfied by the Sheraton site. This effect will be less evident during the weekends
- a possible future development of the Postal Centre building in Cashel Street may provide between 200 and 400 casual parking spaces within easy walking distance of the Gallery. While a potential developer has indicated the possibility of leasing a proportion of these spaces to the Council, the timing and practical arrangements of how these spaces could be managed can not be determined at this stage
- during construction of the new Gallery the temporary displacement of the onsite parking will generate additional pressures on available casual parking associated with the Cultural Precinct during the day and evening/weekends. However the temporary casual carpark proposed for the King Edward Barracks site will provide relief in this regard

Based on these findings it is recommended that:

 the Council pursue the incorporation of carparking spaces within the basement of the new Gallery to meet the typical weekly parking demands of the Gallery itself (100 spaces) plus the demands satisfied by the existing parking within the site that will not be accommodated elsewhere

- with the imminent completion of the Farmers carpark, it is considered that some 265 carparking spaces will be required. It is unlikely that two levels of parking (400-450 spaces) could be justified within the new Gallery, particularly bearing in mind the incremental cost of deeper construction. Accordingly, it is recommended that a single level covering the full site should be included in the design of the Gallery. This will provide some 210 parking spaces given the need for ramps and structural elements
- in parallel with the design process, negotiations should be undertaken with potential developers of the Postal Centre and any other local properties with a view to utilising such additional parking to either complement or reduce the need for the parking recommended for the Gallery
- in order to maintain and enhance the utility of the parking facilities the pricing structure should be designed so as to encourage short stay parking up to three hours duration and to discourage any heavy demand for all-day commuter parking
- arrangements be made during construction for the existing carparking on the site to be replaced within other parking areas such as the YMCA site in Cashel Street or the King Edward Barracks site in Cashel Street. To ensure an adequate parking supply to cater for the larger crowds associated with the various events within the Precinct, special temporary parking provision may be needed within North Hagley Park

Traffic Design Group 12 March 1998

1. INTRODUCTION

Since 1969 the Robert McDougall Art Gallery has recommended to the City Council that the development of a new Art Gallery to replace the existing, somewhat inappropriately located, Art Gallery be pursued as a matter of urgency. Its present location to the rear of the Canterbury Museum and arranged with pedestrian access through the Botanic Gardens means that the Gallery has only limited visual impact and attraction from Rolleston Avenue and the Arts Centre in Worcester Street. A number of alternative proposals have been investigated over the past few years, with the preferred option being the purchase and development of the former Sheraton Hotel site in Montreal Street.

The City Council is currently in the process of preparing a functional brief for the development of a new Art Gallery on the Sheraton site and has commissioned Traffic Design Group to prepare a detailed recommendation regarding the appropriate level of parking for the site. This parking provision will be required to accommodate the demands of the new Gallery itself, but consideration is also required of the possible replacement, removal or relocation of the 265 carparking spaces currently located within the site. The following report sets out the process followed in reviewing the various parking demands generated within the vicinity of the site including the Art Gallery and the various elements of the Cultural Precinct including the Arts Centre, Museum and associated activities.

The effects of permanently removing the existing 265 parking spaces is discussed together with an assessment of potential impacts on the surrounding road network and associated parking areas during the construction phase of the project. The report then provides a recommendation for the level of parking within the new Art Gallery.

2. STRATEGIC LOCATION

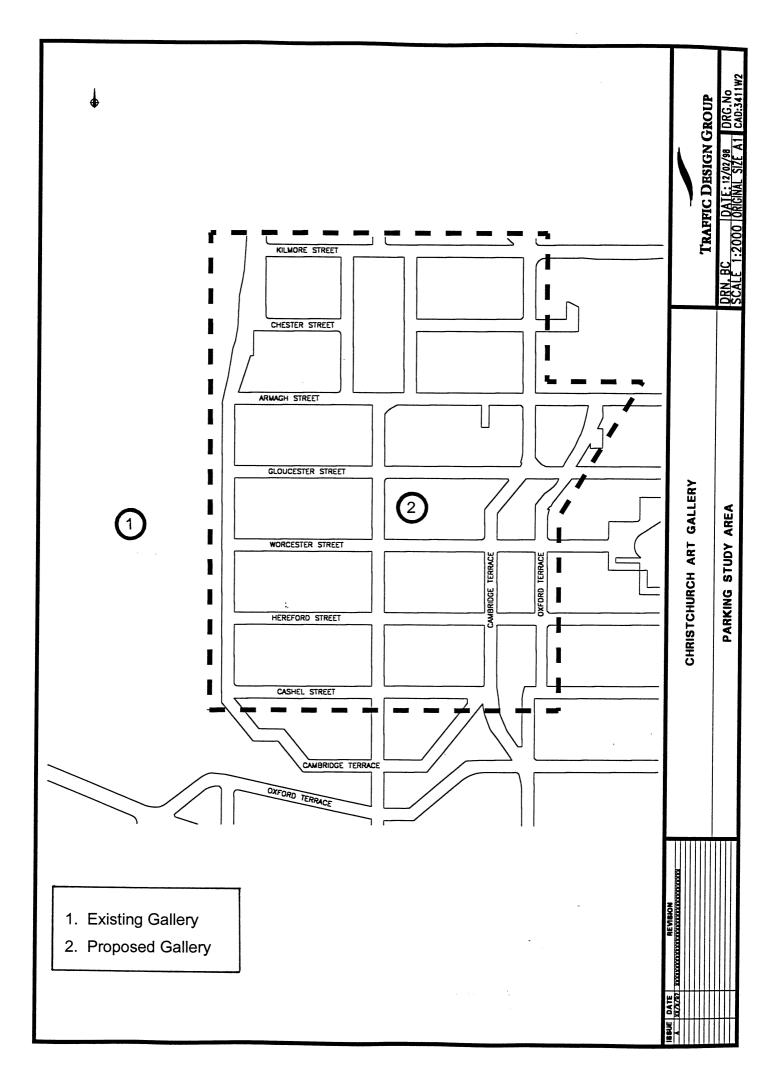
Figure 1 shows the study area adopted for this Study together with the location of the existing and proposed Art Gallery sites. There are a number of different activities within this area commonly referred to as the "Cultural Precinct" including the existing Robert McDougall Art Gallery, the Canterbury Museum and Botanic Gardens located to the west of Rolleston Avenue, the Centre of Contemporary Art in Gloucester Street and the successful and busy Arts Centre complex incorporating the Art Gallery Annex and other arts orientated activities located within the block bounded by Hereford Street, Worcester Street, Rolleston Avenue and Montreal Street.

Other key activities in the Study Area include the King Edward Barracks site which it is intended to redevelop for commercial and office space, but which will be operational as a carpark for sometime because of the current economic climate, the Christchurch Central Police Station and the NZ Post building all located between Cambridge Terrace and Montreal Street. The YMCA and YHA hostels and associated facilities are located close to the Arts Centre along Rolleston Avenue. The Central City commercial area east of the Avon River begins at the boundary of the Study Area with the lively restaurant and bars located along Oxford Terrace. The existing Noahs parking building and the soon to be completed Farmers parking building are located either at or outside the boundary of the Study Area.

3. EXISTING PARKING INVENTORY

3.1 Kerbside Parking

The Central City blocks within the Study Area bounded by Kilmore Street, Park Terrace and Rolleston Avenue, Cambridge Terrace and Oxford Terrace comprise a total of some 1,187 public kerbside parking spaces. These



spaces currently provide for a variety of different uses and as such are controlled using the following time limit controls:

Table 1 : Study Area Kerbside Parking Inventory

PARKING CONTROL	NUMBER OF SPACES
All Day	458
P180 - Coupons	40
P120 - Meters	392
- Signs	16
P60 - Meters	123
- Signs	53
P30 - Meters	20
- Signs	7
P15	10
P5	19
TOTAL PUBLIC PARKING	1138
Loading Zone (P5)	34
Residents Parking	10
Disabled Persons Parking	5
TOTAL OTHER PARKING	49
TOTAL KERBSIDE SPACES	1,187

Just over a third of kerbside spaces within this area are unrestricted while a further third have two hour parking limits. The remaining third or some 321 spaces are split between the various short stay limits, loading zone, Disabled Persons and Residents Only parking restrictions.

3.2 Off-Street Parking

Within and in close proximity to the Study Area, the following off-street parking facilities are present:

Table 2: Off-Street Parking Areas

LOCATION	TYPES AND NUMBER OF			
200/11014				
VIIA Dellector Avenue	SPACES AVAILABLE			
YHA Rolleston Avenue				
P180	53			
Reserved	29			
YMCA Cashel Street				
Reserved	78			
Sheraton Site, Gloucester Street				
Casual	190			
Reserved	75			
Park Royal, Kilmore Street				
Casual	160*			
Reserved	71			
Noahs Oxford Terrace				
Casual	285			
Reserved	35			
Lichfield Street				
Casual	643			
Reserved	197			
TOTAL AVAILABLE	1816			
Farmers Building	420			
(completion 1999)				
Hospital Parking Building	350			
(completion 2000)				
King Edward Barracks (Privately Owned)	310			
(interim parking supply up till 2002)	,			
TOTAL PROPOSED	4000			
TOTAL PROPOSED	1080			

*NOTE: During evening peak periods further parking for up to 12 vehicles is created by utilisation of Reserved spaces.

This data shows that there are a total of around some 1,800 off-street parking spaces available within close proximity of the study area. It is also noted that the soon-to-be-completed Farmers development, the proposed Hospital building and the King Edward Barracks site will progressively add up to 1000 further spaces into the pool of parking resource from about the

end of 2000. The Barracks site does however intend and is required under its Resource Consent to reduce total parking provided after two years and again after five years of operation. The split of short-stay and long-stay parking provided within the proposed Council sites is not confirmed. The Council intends to monitor the demand for short and long stay parking within both the Farmers and Hospital facilities in order to match the short stay demand as its primary goal and then to use any remaining parking for long stay users. This management strategy has been developed in accordance with the Council's parking objectives of meeting short stay demand within the Central City.

The Sheraton site is currently allocated on a "first come, first served" basis, as a normal coupon parking area with 190 spaces available for casual public use and 75 reserved spaces.

4. PRESENT PARKING PATTERNS

4.1 Kerbside Occupancy

As part of it's on-going parking strategy the City Council City Streets Unit undertook an extensive and detailed parking occupancy study for all of the Central City area and the wider Central Business District (CBD) within the Four Avenues in December 1994. This survey provided a comprehensive and detailed snap-shot of the parking usage patterns of all kerbside spaces within the Central City on an individual block by block basis.

A subset of this survey data was obtained for the Study Area adopted for this Study comprising those areas between Kilmore Street, Oxford Terrace, Cambridge Terrace and Rolleston Avenue.

The results of the 1994 survey showed that across the Study Area:

- the maximum weekday parking occupancy of the available allday kerbside parking spaces at 12:30pm was 94% leaving only around 30 to 35 spare all-day spaces available
- other short-stay parking areas (P120, P60, P30) were similarly occupied to levels of around 90-100% of the available capacity during peak periods
- practically all of the city blocks surveyed within the Study Area reached their total parking capacity at some stage during the course of the survey.

These results from the December 1994 City Council survey showed that parking demand was consistently high across all street frontages within the Study Area during the weekday period surveyed. It should be noted that while the 1994 City Council surveys were carried out in December a traditionally busier month than average, the occupancy levels of unrestricted all-day parking which is typically related to employee parking demand rather than shopper or recreational visitor demand, are expected to be comparable with the patterns of parking demand at other times of the year.

4.2 1997 Update Surveys

In order to review the suitability of the Council's 1994 Central City parking occupancy survey results, a selection of kerbside parking areas comprising some 270 spaces and generally including the sections of Gloucester, Worcester and Hereford Streets between Cambridge Terrace and Rolleston Avenue were re-surveyed at the following times:

Wednesday 21 January 1998 2:00 – 4:00 pm

6:00 – 9:00 pm

Saturday 17 January 1998
 11:00 am – 2:00 pm

These times were selected to determine any significant changes in the pattern of both short-stay and long-stay parking within the immediate vicinity

of the existing and proposed Art Gallery sites, as well as to assess any particular variation in parking patterns through the course of evening and weekend periods in this area.

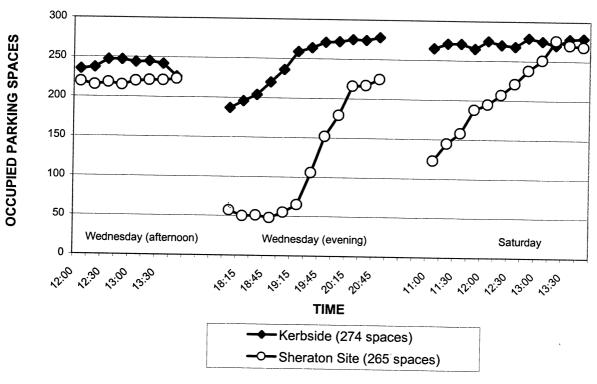
The areas of kerbside parking selected for this calibration survey comprised the lengths of Cambridge Terrace, Hereford Street, Gloucester Street, Worcester Street, Rolleston Avenue and Montreal Street generally surrounding the new Art Gallery site. The midday-early afternoon survey on Wednesday 21 January revealed the maximum overall parking occupancy of all spaces surveyed to be well in excess of 90% with little variation throughout the period. It was also noted from these surveys that moderate levels of illegal parking by way of casual parking over loading zones and broken yellow lines, are currently in evidence. While the exact motivation of such illegal parking is unknown it may be as a consequence of the high levels of parking demand throughout this area being unable to be met by the available parking supply. It may also be noted that current levels of both enforcement and penalties in this regard are an inadequate deterrent to illegal parking in the area.

An important feature to arise out of these surveys was the fact that the fully occupied parking at kerbsides and on the Sheraton site coincided with times when the Noahs carparking building, the closest of the Council parking buildings, was open and had spare parking capacity. Obviously this alternative parking location situated just minutes walk from the Arts Centre is not considered as a convenient parking facility by visitors to the area.

Figure 2 illustrates the pattern of overall parking occupancy throughout the January 1998 surveys. The key features to note from this pattern are:

 a generally steady demand for around 240 kerbside parking spaces or 87% of total available kerbside capacity during the Wednesday afternoon.

CALIBRATION SURVEY AREA PARKING OCCUPANCY Wed 21 and Sat 17 Jan 1998



- Similarly steady demand patterns for some 220 spaces or 83% of the available capacity within the Sheraton site over the same time.
- Occupancy of both the kerbside and Sheraton areas drops markedly following the end of a typical weekday reflecting the departure of employment related parked vehicles from the area and the closing of business and retail premises for the day, followed by a moderate to rapid filling of these spaces from about 7.00pm on the Wednesday. The parking activity surveyed at this time was largely associated with a Buskers Festival event that evening at the Dux de Lux restaurant. The graph shows that there was a preferential demand for kerbside spaces in the area equivalent to the available supply by about 8.00pm. The Sheraton site usage during this evening survey peaked later at 225 spaces or 85% of capacity at 8.30 9.00pm.
- the pattern recorded on the Saturday was similar with practically 100% or full utilisation of all kerbside parking in the survey area throughout the 11.00am 2.00pm survey. The Sheraton site took longer to reach its capacity occupancy at up to 270 spaces. During these busy times some drivers made the most of the generally unmarked parking arrangements within this site, and adopted closer parking or parked in aisles and within planted areas.
- This mid afternoon period on the Saturday represented the period of highest total occupancy of spaces at some 548 vehicles within the survey area.

These January 1998 surveys generally confirm the results of the earlier Council surveys of week day parking occupancy patterns indicating typical midday occupancy levels of between 90 and 100% of available capacity. The surveys also provided useful data on the evening and weekend patterns. While the January survey period may not be entirely representative of patterns at other times it has shown some important aspects of local parking behaviour. In general, the occurrence of major festival events such as the Buskers Festival and more recently the Festival of Romance, create parking demands equivalent to at least the available public parking capacity of the

survey area and beyond up to around 500-700m from Worcester Street. At these times visitors to the area are prepared to park at least four to five minutes walk from the Cultural Precinct and surrounds.

5. UTILISATION OF SHERATON SITE

The January 1998 surveys of parking usage within the Sheraton site have shown that during most weekdays around 220-250 vehicles are regularly parked within the area. Little variation in the parking occupancy level of the site is recorded through the middle part of each weekday indicating that the majority of carpark users park for extended periods and probably for much of the day. As the weekday evening survey showed at around 6.00pm only some 50-60 vehicles remain in the Sheraton site. However on evenings when events within the Cultural Precinct are being held the demand for parking in the Sheraton site rises quickly from about 7.00pm reaching almost full utilisation of the casual parking area through the middle of the evening. Similar patterns of increasing usage were recorded during the Saturday survey reaching full theoretical capacity and more by about 2.00pm.

Other parking investigations undertaken at various main centres throughout New Zealand have established that employees within the City Centre are generally prepared to walk for up to four or five minutes from their carparking location to their place of employment. Clearly some people will be prepared to walk further, however as a generalisation a convenient employee walking distance from car to work is about 350 – 400m equivalent to around five minutes walking time.

Such distances from the Sheraton site encompass all of the commercial buildings between Rolleston Avenue and about half way between Oxford Terrace and Colombo Street and from Chester Street to Cashel Street. This catchment area clearly encompasses a wide variety of commercial activities including a number of significant office blocks particularly east of Oxford Terrace. It should also be noted that this catchment substantially overlaps

the equivalent catchment for the Noahs carpark and also has a minor overlap with the catchment from the proposed Farmers carpark.

The heavy utilisation of free all-day parking in the lengths of Cashel, Hereford, Gloucester and Armagh Streets west of Montreal Street also indicates that workers from this western fringe of the central City are prepared to walk at least 350m to their place of work.

As part of a limited sample of questionnaire interviews at the Sheraton site during the Saturday survey on 17 January, drivers were asked a simple question about their main destination after leaving their car. Approximately 60% of people interviewed indicated that they were headed to the Cultural Precinct area, 20% to the northern CBD and the remaining 20% split between the southern CBD and the area between Worcester Street and Armagh Street west of the site. Clearly, the parking activity during this weekend period is dominated by the attraction of the Cultural Precinct and its popular range of events and regular Arts Centre market days every Saturday and Sunday.

Shopping or recreation parking and the associated walking times have been found by other studies to be generally one to two minutes shorter than employee walking distances between parking and place of work. It is further recognised that the attraction of the proposed Art Gallery will be one of convenience and ease of access for all ages and all abilities as well as during all weather conditions. The Gallery is generally considered to be an attractive destination on wet days during which walking distances adopted tend to be comparatively shorter than on fine days. It is therefore considered that to meet this particular objective of the Gallery development and the Council, that walking distances of not more than 250m should be adopted for Gallery visitor parking assessments.

6. CITY COUNCIL PARKING POLICIES

The City Council has undertaken a wide range of parking related studies in its role as owner and manager of a number of key parking facilities including the extensive areas of around 4,000 kerbside parking spaces within the Four Avenues as well as some 2,200 off-street spaces. In order to set in place the basis for city-wide planning by both the Council and private interests, the Council's City Plan includes a number of policy statements and objectives specifically aimed at management and development of parking provision in the CBD.

The key policies which are of most importance in this current study include:

Policy 7.6.1

To set minimum parking requirements for each activity and location based on parking demand for each land use, while not necessarily accommodating peak requirements.

This policy is an important base from which to review the need for on-site parking associated with the new Art Gallery. A suitable design parking demand must be satisfied within the new Gallery site, however it should be accepted that there will be a number of occasions during the course of the Gallery's operation when the parking demand generated cannot be fully accommodated within the site. At such times the public kerbside space in the vicinity of the site and sometimes further afield will be relied upon to support the operation of the Gallery.

Policy 12.2.2

To ensure adequate and balanced provision of off-street and on-street vehicle parking for short-term visitors and business needs in the central city.

The provision of off-street shopper or short term parking is currently a higher goal for the Council than the provision of facilities for all-day employee or business related parking.

These two policies together with other operational strategies such as the intention to operate the Farmers carpark building and proposed Hospital parking building in a manner which sets the supply of long-stay parking to be available based only on spare capacity after the short-stay demand is fully met, show that the parts of the City Plan policy 12.2.2 leading to a gradual diminution of Council-provided long-stay parking will be implemented through the Council's day-to-day operations.

It is also important to recognise the policy included in the Council's 1995 Central City Parking Policy document which stated that the Council would

"pursue the provision of public parking space for 250+ vehicles in any redevelopment proposals for the Sheraton site".

It is considered from this policy that the provision of 250+ spaces while not specifically "required" within any redevelopment of the Sheraton site is however the Council's specific aim.

7. ART GALLERY OPERATION

7.1 Existing Operation

The existing Robert McDougall Art Gallery provides a total of some 949 m² of public exhibition space within a building located at the southwest corner of the Canterbury Museum in Rolleston Avenue, Christchurch. Review and monitoring of the Gallery's operation over the past several years has shown that the attractiveness and popularity of the existing Gallery is severely limited by both the current location as well as the physical layout and lack of flexibility of the exhibition spaces available. The establishment in 1988 of an exhibition space within the Art Gallery Annex at the Arts Centre represented

an attempt by the Art Gallery and the Community Services Committee of the City Council to address both of these key deficiencies, as well as providing an exhibition space specifically dedicated to contemporary art displays.

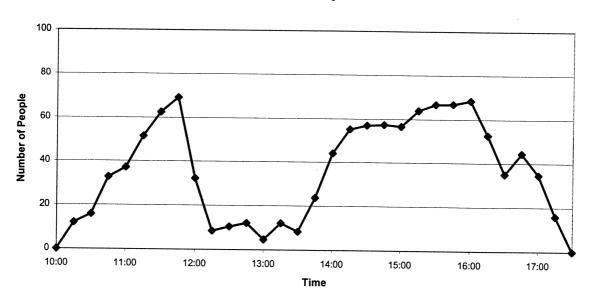
Records of total arrivals through the Robert McDougall Gallery and Art Annex facilities since 1990 have shown a steady rise in total annual visitor numbers to both facilities from around 204,800 in 1990 peaking at 251,000 in 1995 and 249,800 in 1997 during which time the Robert McDougall Gallery attracted 207,300 visitors and the Annex some 42,500 visitors.

As a means of obtaining an indication of total parking demand from the existing gallery, a survey of Gallery visitor arrivals and departures was arranged to cover the full opening hours of the Robert McDougall Gallery on both Saturday 17 January and Wednesday 21 January 1998. A continuous count of all visitor arrivals and departures throughout the day was then used to determine the total number of visitors within the Gallery at any time throughout the day. The pattern of visitor occupancy of the existing Gallery through the full duration of the surveys is shown in the charts of Figure 3.

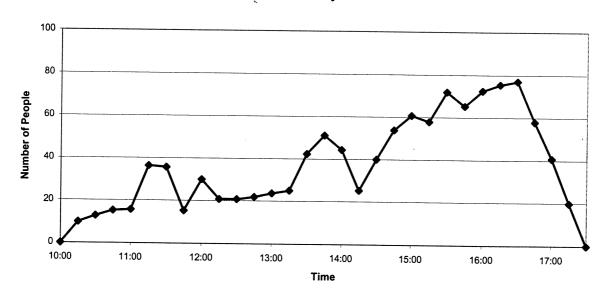
As can be seen the peak attendance of around 70 to 80 visitors occurred on the Wednesday just before 12.00pm midday and again mid-afternoon at 4:00pm on Wednesday, and on the Saturday late afternoon just after 4:00pm. The total daily admissions on the Wednesday and Saturday were 490 and 590 respectively. The peak total attendance therefore corresponds to around 15% of the daily total. Based on reference to Art Gallery records, the peak daily admissions can rise to almost 1000 visitors per day or twice the average daily attendance, when exhibition launches and special events are held. These events can attract up to 500 people at a time or about six times the usual weekday peak attendance.

A random questionnaire interview survey of between 50 and 80 gallery visitors each day of the January surveys was undertaken to indicate the proportion of visitors who arrived by car and the number of cars and other

Number of People in Art Gallery Wednesday



Number of People in Art Gallery Saturday



vehicles generated by these visitors. Results from a total of 142 interviewees showed that on a typical day without any particular special exhibition events, between 50 and 60% of Gallery visitors arrived by car and that the average occupancy of these cars was some 2.4 persons/car. The other key mode of travel reported by the interviews was walking which was stated as the main means of arrival by between 35 and 42% of interviewees. City buses and tour coaches were used by approximately 4% of visitors on both days. Only one of the 140 interviewees arrived by cycle.

By using the results of the interview surveys and visitor counts, it was found that these visitor numbers generated peak hourly parking demands of approximately 20 and 25 cars and up to two tour coaches. For events such as exhibition launches where there would be a greater proportion of visitors from areas beyond the immediate city, it is expected that some 70% to 80% of visitors would arrive by car and, with typical car occupancy rates of between 1.5 and 2.4 persons/car as has been established by other studies of such facilities and events, would generate a peak parking demand of 150-200 vehicles.

It was also established by the visitor interview surveys that approximately 40 -50% of the Gallery visitors who arrived by car parked between Rolleston Avenue and Montreal Street. On the Saturday, a greater proportion parked around the Arts Centre and adjoining kerbside parking areas. These areas tend to be within a convenient two to three minute walking distance of the Art Gallery. Few visitors indicated that they parked within the block bounded by Montreal/Worcester/Cambridge/Cashel and virtually no-one parked beyond Cambridge Terrace. Obviously this distribution of preferred parking location for existing Gallery visitors is a function of both convenient walking distances as well as the availability of parking spaces within the area and the number of other attractions available for visitors to this area. These surveys of gallery visitors indicated that few visitors to the Gallery are prepared or need to park within the Noahs parking building and virtually none in the Lichfield Street building. It is therefore concluded that few Cultural Precinct visitors

park beyond a 250m radius of the area. This behaviour is expected to continue through the development of the new Art Gallery.

The limited use of public transport by existing Gallery visitors is considered to be a function of both the availability and attractiveness of the regular public transport routes operating in the vicinity. The lack of a regular high quality service dedicated to the Cultural Precinct area or even a shuttle service between Cathedral Square and the Arts Centre, means that most visitors prefer the convenience of car travel. While the tram does provide for a limited proportion of existing visitors it is not considered that it would cater for more than a minor proportion of future visitors to the Gallery. This situation is not expected to change within the next several years, and the proposed Art Gallery will continue to attract around 50-60% of its visitors by private car.

7.2 Future Gallery Proposals

The Strategy and Resources Committee of the City Council are currently in the process of preparing a functional brief for the development of a new Art Gallery within the former Sheraton Hotel site in Montreal Street between Gloucester Street and Worcester Street. The site was bought by the owners of the Sheraton Hotel chain during the 1980's and was earmarked as a hotel site. These plans were not fulfilled and since 1988 the site has been leased by the City Council to provide casual and reserved parking serving the Cultural Precinct as well as commuter parking for workers employed in the western parts of the city.

Concept plans for this site focus on the development of a new Art Gallery intended to extend the existing facilities provided by the Robert McDougall Gallery and Art Annex as well as providing new facilities which might include cafes, restaurants, a bookshop, meeting rooms and associated facilities. At this stage the indicative elements of such a development would include:

- public exhibition space of around 3,000 m²
- flexibility of exhibition space to cater for the needs of particular exhibitions and displays
- café and bistro/restaurant
- two retail outlets (eg bookshop)
- meeting and catering facilities to provide for corporate and special event functions
- a landscaped park area along the Montreal Street frontage
- on-site visitor parking

8. EXPECTED PARKING DEMAND

New Art Gallery

Estimates prepared by Carson Group South Island who are the Project Managers for the Art Gallery Project, Art Gallery management personnel and Council officers involved in the project, indicate that special events such as corporate exhibition launches or major touring displays could be expected to attract between 800 and 1000 visitors to the Gallery at any one time. While such events are mainly expected to occur during evening or out-of-business hours when adjacent kerbside parking will also generally be available, provision of adequate on-site parking for Gallery visitors should be made to fully satisfy the demand of the majority of normal exhibitions and events. On-street parking cannot be guaranteed due to other demands in the vicinity.

Detailed consultation with the Gallery management team has enabled the following schedule of likely Gallery attendances in terms of the total number of people within the Gallery at one time, with an estimate of the frequency of these events throughout the course of a typical year, and the associated peak Gallery parking demand expressed as the number of parked cars. The records of other gallery facilities and surveys of event parking demands undertaken by Traffic Design Group have been used to prepare the following estimates of gallery attendance.

Table 3: Expected Gallery Attendances

EVENT	ATTENDANCE	% BY	CAR	PARKING	
	(people)	CAR	OCCUPANCY	DEMAND	
			(pers/car)	Cars	Coaches
School group visit (daily)	50	10	2.0	2	4
Corloor group visit (daily)	30	10	2.0		ı
Organised Gallery Tour (daily)	100	70	2.4	30	2
Performance, Film, Lectures	180	70	1.5	85	-
(weekly)					
Book or Exhibition Launch,	300	80	1.5	160	2
Lectures (monthly)					
Touring Exhibition Launch (two	800	80	1.5	430	3
monthly)					

As can be seen, it is considered that there would be at least 10 to 12 occasions throughout the year when attendances of at least 300 people will be expected at events held at the new gallery with perhaps six events per year when 800 people would be within the complex. Based on records of similar sorts of occasions held at other Galleries and exhibitions and the data available from the existing Gallery, it is expected that the monthly events would generate peak parking demands of between 100 and 160 vehicles. On about six occasions throughout the year peak demands of up to 430 vehicles will be generated. On a weekly basis, attendances of around 180 people and parking demands of some 85-100 vehicles associated with performances or lectures plus casual visitors to the Gallery are expected within the proposed Art Gallery.

These demand estimates have been prepared based on the information available from both the surveys undertaken during January 1998 and the future estimates of Gallery attendances. As can be seen from the estimates, a demand of around 85 spaces plus adequate staff parking is necessary for the new site to accommodate the typical weekly events. Providing a parking supply to meet the demands of say 12 events per year at the Gallery as a

stand-alone activity is not a viable use of resources. However, and as will be discussed shortly, the proposed Gallery is not in an isolated location so that all parking provided on site should be conveniently accessible by visitors to other locations within the Cultural Precinct.

The ancillary facilities proposed within the new Gallery site such as the café. bistro and retail stores will generally function in a complementary manner with respect to the main activities in that they will form an additional activity within an already established trip to the Gallery. Advice from Gallery staff also indicates that some of the visitors to the new Gallery will also visit other locations in the Precinct such as the Arts Centre or Museum during the course of their journey. Such linked-trip patterns will be most frequent during the middle of each day while the evening patterns will tend to exhibit single destination visits such as a Gallery exhibition launch, or a Court Theatre performance. The existence of the linked-trip or multi-visit journeys associated with the Gallery translate into an economy in total parking demand in this area by generating a comparatively longer parking duration or dwell time within a parking space. This feature of parking and visitor behaviour is most likely to have the greatest effect during the middle of the day as visitors are attracted to a number of locations within the local area and also when the availability of kerbside parking is at a minimum. The longer parking duration is not expected to significantly affect the overall parking capacity of the area however, suitable time limits and pricing structures will need to be adopted within the facility so as to balance the attractiveness of parking provided against the best utilisation of the available resource.

Cultural Precinct

Other key traffic generators in this area include the Court Theatre which normally attracts audiences of at least 120 to 150 people on six nights a week often rising to the Court One's seating capacity of 291 which would generate a peak parking demand of around 130 spaces using the modal split

and car occupancy rates of the weekly performance events presented in Table 3 above. Indications from the Court Theatre staff are that there are often occasions particularly during summer and during the various Festivals when the Little Theatre holding 123 people is also utilised, generating total Court Theatre complex audiences of up to 400 people at one time and associated peak parking demands of between 150 and 180 vehicles. During the day on most weekdays the Court Theatre does not attract significant number of visitors apart from occasional, special event performances that are likely to generate fewer than 50 parked vehicles at once.

Information from the Canterbury Museum indicates that on a typical day a total of some 1000 people will visit the Museum. Such attendances would typically produce peak parking demands in the order of 50-60 cars and up to three tour coaches. Estimates made by the Museum management show that the annual visitor total which for 1997 was some 460,000 people, is expected to reach almost 750,000 by the year 2000. In this way the Museum is planning on normal daily visitor rates of almost 1600 visitors per day. This daily attendance would typically generate a peak attendance of around 250 people at once and associated parking demands of some 100 cars and up to four coaches during the middle part of each day including Saturdays and Sundays.

The Arts Centre complex contains a vast array of different facilities and caters for a number of events throughout the course of a week including the highly successful market days over the weekend. The January/February period also attracts a number of Festival events during which time the attendances at the many activities within the complex rise significantly. Pedestrian counts undertaken on behalf of the Arts Centre management during February 1997 corresponding to the Festival of Romance event, showed a peak pedestrian count of 2800 people per hour at the departure gates of the Centre.

During more typical periods, the hourly pedestrian counts through the Centre rose to peaks of around 1000 people per hour which would typically generate a parking demand of around 400 vehicles.

It is already known from surveys of the proposed Gallery site that weekday evening parking demands generated by the overlapping demands of the various Cultural Precinct activities during a typical week in January rise to over 300 parked cars. This pattern of overlapping demands is considered to be a regular feature of the local parking activity of the Precinct and environs during much of the year.

Summary

In order to provide a suitable level of service to the Art Gallery on its own, it is considered that a parking provision of approximately 100 spaces be provided within the Gallery site itself. It is clear from even casual observation that the surrounding parts of the Cultural Precinct rely to a large degree on the availability of the present Sheraton site parking facility and adjoining kerbside areas particularly during busy weekends and during many evenings. Based on the information currently available, it is noted that the existing parking demand of the Robert McDougall Gallery is generally small due to its rather isolated location and limited exhibition space. Very few Gallery visitors currently adopt the Sheraton site for parking, therefore the parking demand for the proposed new Gallery will be substantially additional to the existing parking demand both in the vicinity of the site.

If no other new carparking facilities were to be established in the area, the existing 265 spaces within the site should be fully replaced with additional provision for the 100 spaces for the Gallery itself, as a means of continuing the vitality and success of this area. However, the flow-on effects of the new Farmers (and Hospital) carparks, the structural constraints of the Gallery building, and cost efficiencies mean that a lower level of parking

supply could be provided. This is discussed in more detail in the following chapters.

9. CITY PLAN PARKING REQUIREMENTS

The provision of on-site parking for the new Art gallery follows the requirement set by the City Plan for all developments to provide for their parking needs where possible without reliance on kerbside spaces. In this way the existing Gallery relies completely on local kerbside and off-street parking within the local area to satisfy its parking demand.

The proposed Art Gallery site is located in the West Fringe of the Central City Zone within which the City Plan requires on-site parking for all activities to be provided at a minimum rate of 1 space for every 200m² GFA and cycle parking also at a rate of 1 space per 200m² GFA.

Using the indicative gross floor area of the Gallery of some 9000m² GFA (including public exhibition space of some 3000m² and a further 1000m² of general public area) translates into a City Plan on-site parking requirement of 45 car spaces and 45 cycle spaces. Clearly such levels of parking would represent a lower limit of the minimum required for an activity such as office or similar commercial activities and would be somewhat inadequate for the Gallery proposed. This requirement also takes for granted that there is sufficient parking available which will accommodate such activities within convenient walking distance.

Specific land-use parking standards are also given in the City Plan for various different land uses located in zones outside the Central City. While the above West Fringe Rules apply for this site, it is useful to compare the requirement for parking associated specifically with Art Galleries. Table 1b of Section 13 of the Plan sets the parking standard for museums and galleries at:

- 1 visitor parking space per 30m² of PFA (public floor area)
- 1 staff parking space per 300m² PFA
- 1 cycle space per 300m² PFA.

Using the 3000m² of public exhibition space plus 1000m² of general public floor area indicated for the Gallery at this stage, the total on-site requirement (Table 1b) amounts to 133 visitor carparks, 13 staff carparks and 13 cycle parks.

In accordance with Council policies, these parking provision standards attempt to require sufficient on-site parking resources to cover the majority of events expected to occur at typical museums and art galleries while accepting that there will be occasions from time to time when the surrounding kerbside parking areas will be required to satisfy the excess parking demand.

10. PARKING RELOCATION

As discussed above, this study has been commissioned to investigate a number of issues in respect of the parking requirement for the Gallery and replacement of existing parking within the proposed Gallery. The primary options available to the Council in terms of their management of both the short and long stay parking needs of the area are provision of parking spaces to satisfy:

- the Art Gallery parking demand (100 spaces) as well as <u>total</u> replacement of the existing 265 parking spaces on the site
- the Art Gallery parking <u>requirement</u> (45 spaces) or <u>demand</u> plus <u>partial</u> replacement of the existing spaces
- the Art Gallery parking <u>requirement</u> or <u>demand</u> with <u>no</u> replacement of the existing spaces

The following chapter discusses an assessment of the available spare parking capacity within the adjacent part of the City and discusses the relative effects of each of the three options.

10.1 Total Provision

The complete provision of a total of about 365 spaces within the new Gallery building allowing for the Gallery weekly peak demand of 100 spaces plus the replacement of the existing site parking of 265 spaces would require two levels of basement carparking in the building. Two full levels would accommodate 400-450 parking spaces somewhat more than required. The costs involved in such an option are significant with the construction of the second level of underground parking substantially more expensive. Previous estimates indicate capital costs for two full basements of around \$9.0M.

Given that the underground on-site option is advanced, other factors which would influence any design of this facility include the appropriate access and circulation provisions for both vehicles and pedestrians, the creation of an attractive and convenient facility for Gallery visitors and casual parkers, adequate lighting and ventilation systems to ensure safety and security, and an appropriate form of parking management system to allow the integration of Gallery visitor parking as well as the casual parking function.

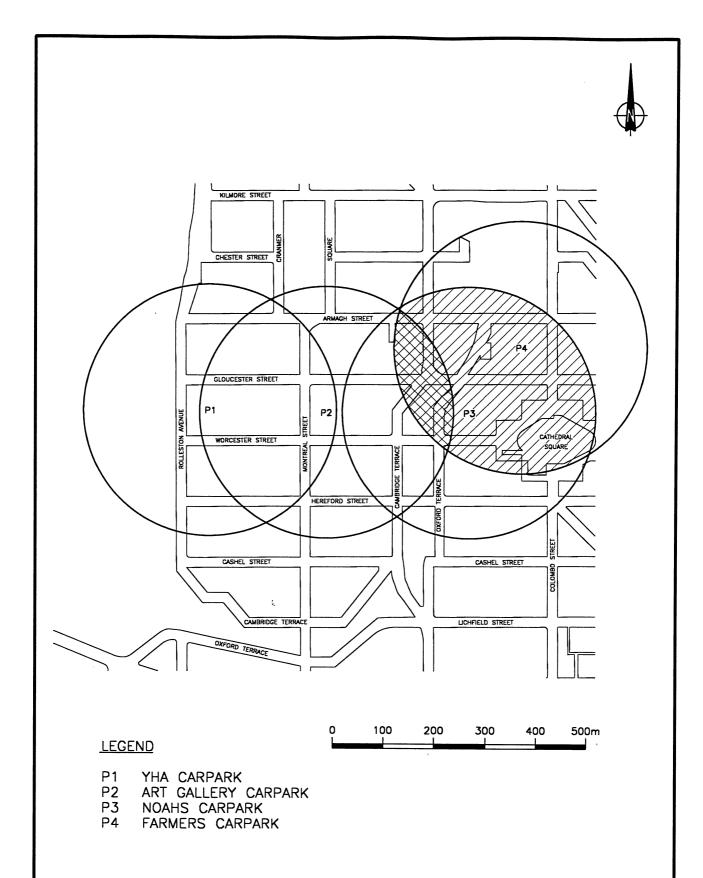
In this location and given the existence of the currently well used spaces, it would be expected that the patterns of use and occupancy currently displayed by this site would be carried through at similar levels into an underground facility on this site. However some people do demonstrate resistance to using parking structures. There is also expected to be some rationalisation of parking demand when the Farmers carpark opens and when the existing free parking on the site during weekday evenings and weekends is removed in favour of parking charges within a new building.

As mentioned previously, the catchment for the existing Sheraton site carpark substantially overlaps the catchment of the Noahs carpark. Figure 4 shows that it will also overlap the catchment for the Farmers carpark to a lesser extent. With the added parking supply afforded by the Farmers carpark (420 spaces), some people in the common catchment will switch from the Sheraton site carpark to use the Farmers carpark. More significantly, there will be a "flow-on" effect with people switching from Noahs to Farmers leaving spare capacity for others to switch from the Sheraton site to Noahs. The new Hospital carpark is expected to have a much lesser influence on the parking demand at the Sheraton site. There may also be some minor increases in demand in this area through the increased patronage of the Museum and other activities and perhaps some suppressed commuter parking demand. The overall effect of the new Farmers and Hospital carparks is expected to be a reduction in the demand at the Sheraton site of up to around 100 spaces.

10.2 Partial Replacement

The "middle ground" option available for the Gallery project is represented by the option of providing parking for the full Art Gallery parking demand (100 spaces) and only a portion of the existing spaces or the parking requirement for the Gallery (45 spaces) plus a portion of the existing parking. If the existing demand is to be reduced by up to 100 with the opening of the new Farmers and Hospital carparks, then it would be sensible to provide for the weekly peak <u>demand</u> of the gallery because of the reduced flexibility for complementary use presented by a smaller facility. In other words, some 265 (100 + 165) spaces should be provided.

Probably the most important aspect of determining the parking strategy is the construction costs associated with the provision of extra levels of underground parking within the new Gallery. With allowance for ramps and structural elements, the number of underground spaces that could be provided in a single level would total about 210. There would be provision



CARPARK CATCHMENTS

for about 110 casual spaces during the weekly design peak of 100 spaces for the Gallery. At other times there will be closer to 200 spaces available for casual use.

Two full basement levels provide for 400-450 spaces which is considerably higher than the 265 space demand predicted. Provision for future growth in parking demand in the vicinity could not justify the large excess of more than 135 spaces. On the other hand one basement level would provide some 55 spaces less than the predicted demand. Generally constructing partial floors is inefficient because the one-off costs of ramps and additional structure increase the cost per carpark. On that basis the option of accommodating the predicted demand on a full level plus part of a level has not been considered specifically.

Partial replacement of the existing parking resource could contribute to a reduction in the overall attractiveness of the Cultural Precinct and environs. However, it is considered that replacing at least a portion of the existing site parking within the new building would be sufficient to support the demands of the surrounding Cultural Precinct area as well as accommodating the regular weekly demands of the Gallery. At busy times it would be necessary for the remaining vehicles not catered for, but forecast to be generated by the Precinct, to be parked further from the Precinct. Gallery visitors should be reasonably assured of on-site parking through the implementation of specific management and access controls for the carpark. It is recognised that the assurance of on-site parking for Gallery visitors would incur greater operational and administrative costs which would need to be assessed as part of the overall provision and management of on-site parking.

10.3 Art Gallery Provision Only

At the low end of the scale is the option of greatest effect in terms of external traffic impact, in which the Gallery requirement of 45 on-site parking spaces or the design demand of 100 on-site parking spaces are provided but the

existing spaces are not replaced. In such a case, drivers who currently make use of these parking spaces for either all-day or short stay visitor parking would be required to adopt either unrestricted kerbside parking in this vicinity and beyond, one of a number of Council controlled parking buildings such as Noahs, Kilmore Street, Lichfield Street or the new Farmers development, or if these options prove undesirable by way of location or operation, adopt other means of transport such as buses or cycling. Long term, businesses whose parking needs are not able to be satisfied in this area may even relocate their premises to locations where parking is available.

Investigations of the availability of all-day parking within both kerbside and off-street areas in this vicinity have been undertaken to assess the spare capacity of surrounding facilities to take up the 265 spaces displaced. Comprehensive kerbside parking surveys undertaken by the Council in December 1994 showed that within the study area bounded by Oxford/Kilmore/Rolleston/Cambridge only around 30 all-day parking spaces were available at the peak parking times at 12:00 – 12:30 pm. Such spare capacity comprised only about seven percent of the total all-day parking supply and only one or two parking spaces in each block of parking. These results have been confirmed by the calibration surveys undertaken in January 1998, even in a traditionally quiet month such as January

A review of the most recent data available from the Council relating to their off-street parking buildings west of Cathedral Square for September 1997, shows that the three parking buildings closest to the Sheraton site namely Kilmore Street (Park Royal), Oxford Terrace (Noahs) and Lichfield Street have a total of only 120 spare parking spaces between them during their peak parking occupancy period at around midday on a typical weekday Monday to Thursday. Approximately 90 of these spaces are within the Lichfield Street Building, the most distant of the three Council facilities some 600-700m from the Sheraton site. The Friday occupancy patterns display

even busier parking activity across all three buildings with fewer than a total of 20 spaces typically available at midday on a Friday.

Accordingly there would clearly be insufficient parking capacity, even with the new Farmers and Hospital facilities, if the existing parking on the Gallery site were not replaced.

10.4 Alternative Sites

A strategic parking assessment has been made of the likely effect of the new parking facilities within this general area. While it is recognised that the Farmers carpark would not be considered convenient by Gallery visitors, there will be some flow-on effects following construction of the Farmers and to a lesser degree the Hospital parking facilities. The Farmers building will relieve some of the existing demand on for example the Noahs building. This in turn is expected to reduce the casual parking demand during the weekday middle of the day in the catchment of the Sheraton site carpark leading to an overall increase in the availability of parking at these times for the Cultural Precinct.

Earlier reports by the Council's City Streets Unit have investigated a number of alternative sites for a parking lot or multi-level parking buildings. A report in 1997 by the City Streets Unit concluded that there were a number of possible alternative sites generally within the Rolleston / Cambridge / Oxford / Armagh block which could accommodate either part or all of the existing spaces. Due to a number of both economic and resource management issues, none of the potential sites were considered suitable. The Zoning and Rules of the Proposed Plan in this area and expected local opposition particularly in the adjoining residential areas would prove difficult for the Council to pursue and achieve a successful outcome.

Even if a number of smaller at-grade parking areas were to be found and the appropriate resource consents achieved, the suitability of dispersed parking

areas creates management issues and potentially undesirable additional traffic effects. In order to provide high levels of attractiveness the lots would need to be sealed, clearly marked out, parking limits and/or parking meters installed and enforced by Council staff. The effect of increased numbers of driveways and associated vehicle movements could be detrimental to the local roading network, whereas the retention of parking within the existing site would simply continue an established pattern of activity.

Other alternative sites were investigated as part of this report, including potential developments of the King Edward Barracks site and the Postal Centre, as well as the proposed Hospital parking building. Current plans in respect of the King Edward Barracks site indicate that at least 100 public casual parking spaces will be available in the near future for a period of up to five years while the commercial development in the site is determined and confirmed.

Plans for the Postal Centre building in Cashel Street are as yet not confirmed however it is understood that there is a potential for between 200 and 400 parking spaces within the site. While these spaces may be available for public casual use, their timing and management cannot be currently confirmed.

The Hospital parking building is expected to provide some 350 spaces on the Manse site in Antigua Street and the St Andrews site between Oxford Terrace and Tuam Street and will be managed by the Council on a similar basis as other Council operated parking facilities. These sites are almost 700m or ten minutes walk from the new Gallery site and as such, are not likely to be favoured by any Gallery visitors. Utilisation of the proposed Hospital parking building and any rearranged casual parking within the hospital grounds itself may however be considered by a small number of Cultural Precinct visitors. Therefore the flow-on effect of the Hospital parking building in relation to the Cultural Precinct parking demand is expected to be relatively small during most times of the week.

11. CONSTRUCTION EFFECTS ON PARKING

A consequence of constructing the Gallery, will be a temporary removal of a portion and at the final stages of construction, all of the existing site parking spaces for a period of up to 18 months. During this time a significant proportion of the construction period all 265 spaces will be displaced from the site to allow sufficient room for construction processes to be undertaken. As will be evident from the preceding chapters, the removal of these spaces will have a significant effect on the pattern of both day-to-day parking within this areas as well as event-generated parking associated with the Cultural Precinct.

During the ordinary course of each day, the commuter parking currently using the site will be required to find alternative all-day parking. It is likely that any limited spare capacity in the Council operated off-street parking areas will be taken up as well as the adoption of all-day kerbside parking along streets further out from the centre of the city. The opening of the temporary carpark at the King Edward Barracks site will be of considerable assistance in this regard with the resource consent for the carpark requiring at least 100 spaces for public use over the likely period of construction of the Gallery.

The parking demand assessments undertaken for this report have shown that peak event parking demand for over 500 parked vehicles commonly occurs through the weekday evening and Saturday early afternoon periods over summer. The effect of removing the majority of the existing spaces will be to shift the area occupied by parked vehicles out to areas including Park Terrace, Kilmore Street, Hagley Avenue and Riccarton Avenue. In such circumstances visitors will be required to walk for up to five and six minutes

between their cars and the Cultural Precinct. Parking facilities within the convenient walking radius of three minutes from the centre of the Precinct are likely to be heavily used with a consequential increase in the volume of circulating and searching traffic throughout these areas. Increases in intersection delay and queuing may also be experienced particularly along the Montreal Street route due to these circulating vehicles. The Council should investigate an increased usage of a section of Hagley Park for carparking as currently occurs for events in South Hagley Park. This area may be required to accommodate the excess demand for large events such as the various festivals held during January and February each year.

12. CONCLUSION

The provision of quality parking in convenient locations is a key to the attractiveness and success of both commercial and entertainment/cultural activities. This is particularly evident within the Cultural Precinct area of Christchurch west of the Central City. On-going development of the range of facilities available, heightened marketing of events and the success of tourism marketing have lead to the Cultural Precinct's popularity and success.

Proposals dating back as far as 1969 have recommended that the Robert McDougall Art Gallery currently positioned to the rear of the Canterbury Museum in Rolleston Avenue be relocated so as to better project the City's art heritage and assets. A functional brief for a new Gallery to be situated on the former Sheraton Hotel site between Worcester and Gloucester Streets is currently being prepared by the Strategy and Resources Committee of the Council in association with Gallery management.

Based on a review both of current parking usage of the proposed Art Gallery site and surrounding kerbside areas, and of the parking demand, visitor attendance patterns of the various Cultural Precinct activities, as well as future parking facilities, it is predicted that the peak weekly demand for

parking on the site will be some 265 spaces. It is not possible to justify full replacement of the existing parking on the site involving provision of two levels of parking and 400-450 spaces within the new Gallery building. On the other hand it would be inappropriate to make no provision for replacing the existing parking.

The inclusion of a single full parking level within the Gallery structure incorporating some 210 spaces is recommended as the most practical and cost effective means for providing convenient parking for the Art Gallery and maintaining some casual parking for the surrounding area.

The proposed Art Gallery itself will generate a weekly peak parking demand of up to 100 spaces. The provision of parking spaces over and above the Gallery demand will enable continued support of the surrounding Cultural Precinct activities. These spaces would continue to provide the important multi-functional purposes being conveniently located to the adjoining commercial areas of the western CBD as well as underpinning the attractiveness and success of the Cultural Precinct particularly during weekday evenings and at weekends.

If the Postal Centre building or other surrounding sites are developed in the future to provide additional casual parking with convenient walking links then such spaces will form an additional support to the Art Gallery in particular and the Cultural Precinct as a whole. If a large number of acceptable spaces are able to be satisfactorily negotiated in the coming months then it could be possible to reduce the parking component at a later stage in the design of the Gallery if desired.

Any pricing strategy developed for the operation of the on-site parking should be designed to follow the Council's overall strategy of actively meeting the short stay parking (under three hours duration) and to facilitate where possible through the use of excess capacity reasonable all-day commuter parking. It should be expected that not all of the existing

commuter parking will necessarily be met by this proposal however other Central City parking facilities such as the Farmers and King Edward Barracks site will contribute to meeting the weekday parking needs of the area.

Construction of the Art Gallery will involve a temporary removal of up to all 265 of the existing spaces on site for a period of up to 18 months. During this time arrangements should be made with surrounding property owners such as the YMCA and King Edward Barracks to provide temporary public parking within those properties. During the busy summer festival season, the Council will need to investigate the provision of additional casual parking within three to five minutes walk of the Worcester Boulevard. This may be achieved through short-term, event-based allocation of a section of North Hagley Park. Obviously, over this construction period all-day parking will be spread to more distant sections of kerbside parking and a proportion catered for by existing and proposed off-street parking buildings such as the Farmers or King Edward Barracks sites which are currently under construction.

In summary, it is recommended that the provision of a single basement level should be included in the functional brief for the proposed Art Gallery carpark with flexibility retained to reduce the parking to a minimum of 100 spaces representing the weekly peak Gallery parking demands, if alternative off-site parking which can provide the same level of service were to be identified before construction. One full parking level will accommodate some 210 spaces which will satisfy the weekly peak parking demand for the Gallery while still ensuring some casual spaces to support the on-going success and vibrancy of the Precinct and surrounding areas of the Central City.

Report prepared by

D J McKenzie

Traffic Engineer

Report checked by

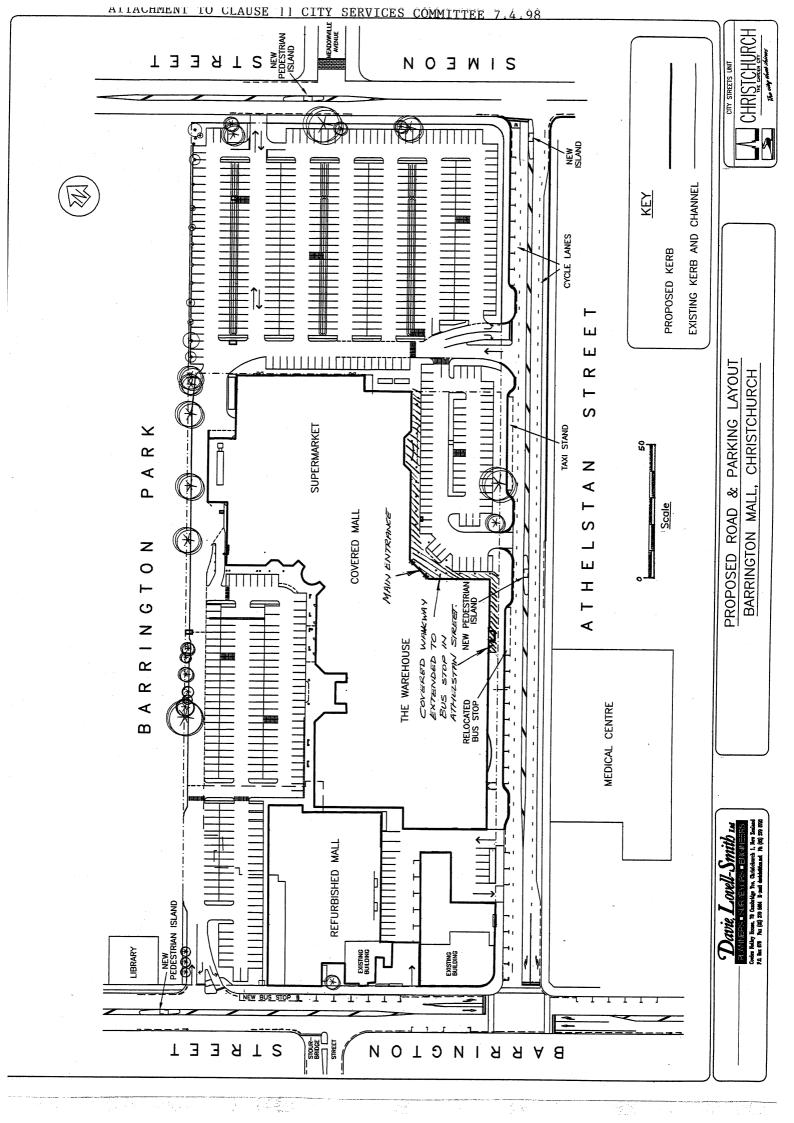
A T Penny

Design Director

POLICE STATION



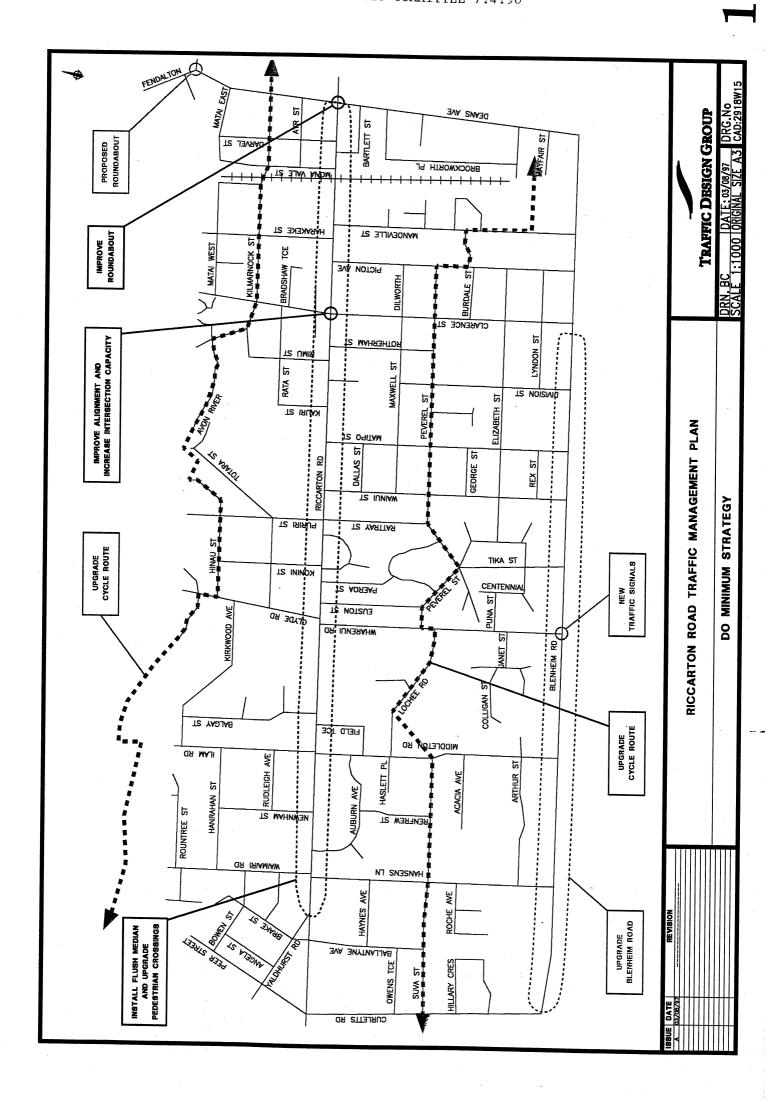
KEB Carpark

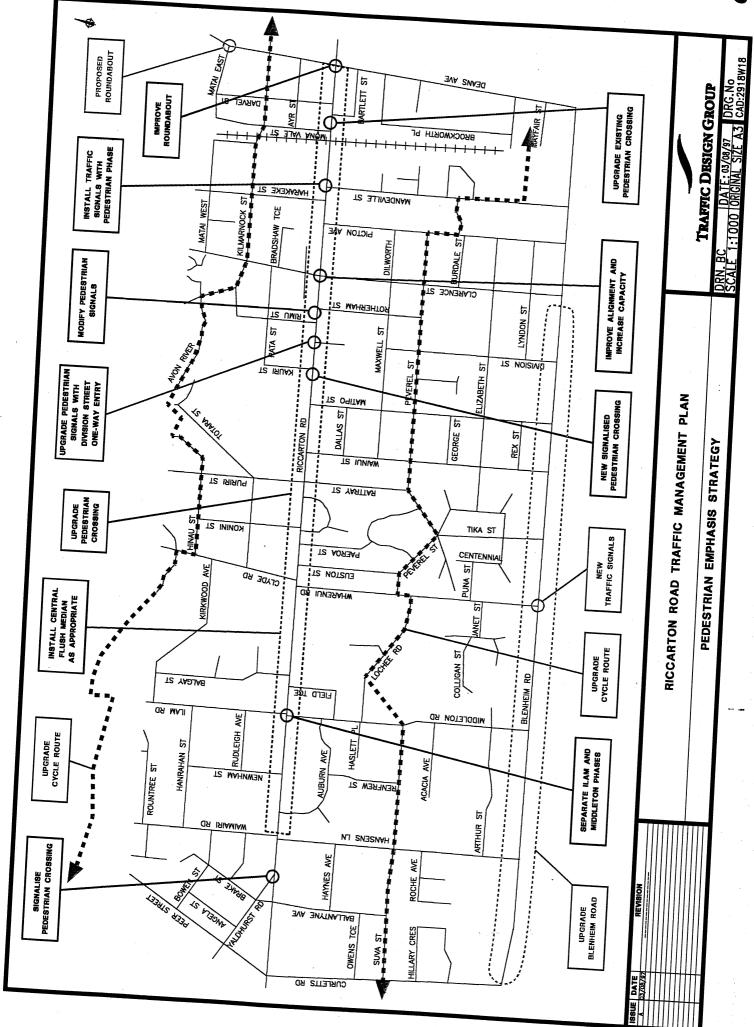


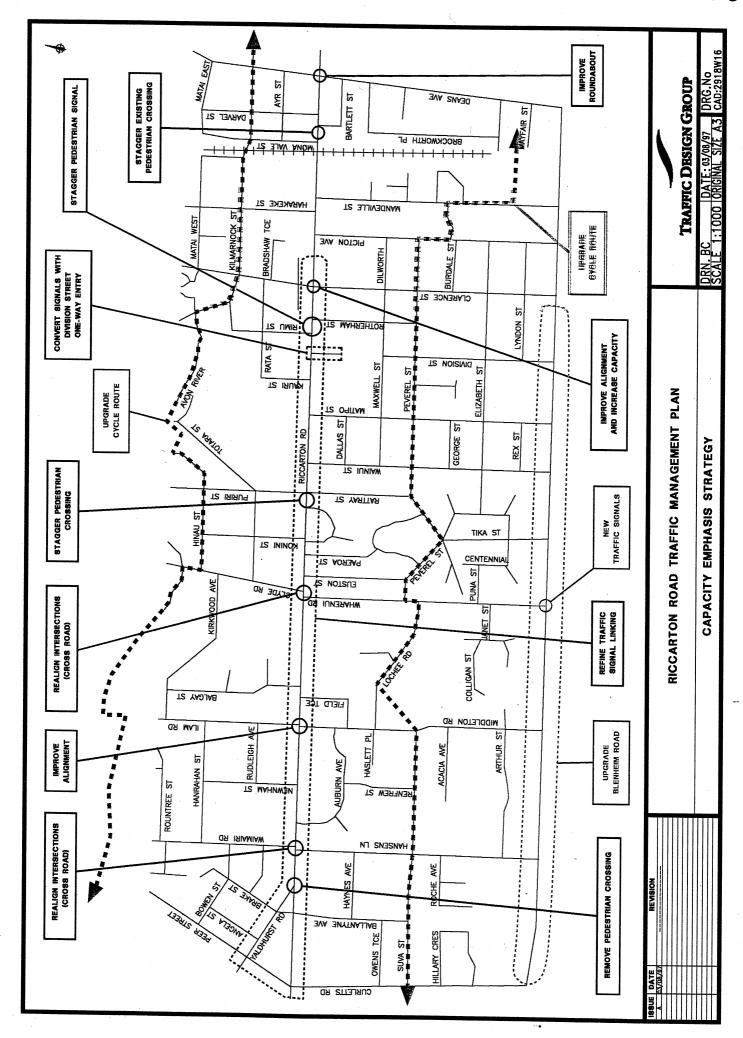
SCHEDULE

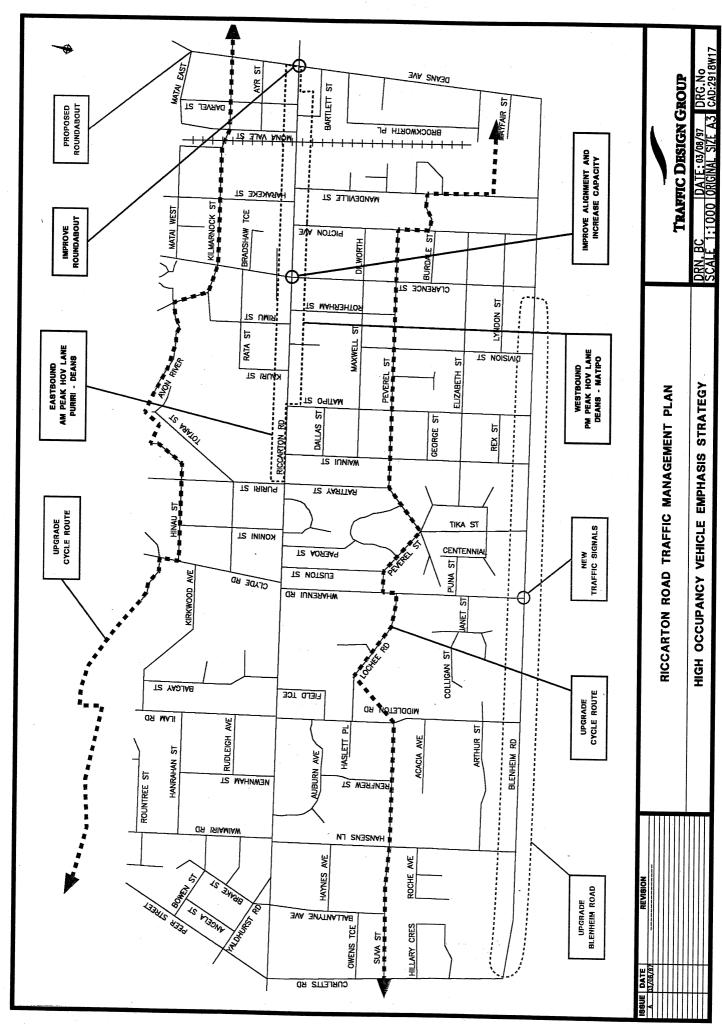
- 1. That the 'zebra' pedestrian crossing adjacent to No 247 Barrington Street be removed.
- 2. That the 'Give Way' control on Athelston street at Barrington Street be revoked.
- 3. That 'traffic signals' be installed at the Athelston Street/Barrington Street intersection.
- 4. That all existing parking restrictions on Barrington, Athelston and Milton Streets in the vicinity of Barrington Mall be revoked.
- 5. That the parking of vehicles be restricted to a maximum period of 30 minutes on the north eastern side of Barrington Street commencing at a point 25 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 5.5 metres.
- 6. That the parking of vehicles be restricted to a maximum period of 30 minutes on the north eastern side of Barrington Street commencing at a point 42 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 6 metres.
- 7. That the parking of vehicles be restricted to a maximum period of 30 minutes on the north east side of Barrington Street commencing at a point 54 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 44 metres.
- 8. That the parking of vehicles be restricted to a maximum period of 30 minutes (at any time) on the south western side of Barrington Street commencing at a point 16 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 6.0 metres.
- 9. That the parking of vehicles be restricted to a maximum period of 30 minutes (at any time) on the south western side of Barrington Street commencing at a point 28 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 6 metres.
- 10. That the parking of vehicles be restricted to a maximum period of 30 minutes on the south western side of Barrington Street commencing at a point 15 metres from its intersection with Stourbridge Street and extending in a northerly direction for a distance of 27 metres.
- 11. That the parking of vehicles be restricted to a maximum period of 30 minutes on the south western side of Barrington Street commencing at a point 67 metres form its intersection with Stourbridge Street and extending in a northerly direction for a distance of 8 metres.
- 12. That the parking of vehicles be restricted to a maximum period of 30 minutes on the south western side of Barrington Street commencing at a point 81 metres from its intersection with Stourbridge Street and extending in a northerly direction for a distance of 7 metres.
- 13. That the parking of vehicles be restricted to a maximum period of 30 minutes on the north eastern side of Barrington Street commencing at a point 20 metres from its intersection with Kinver Place and extending in a southerly direction for a distance of 12 metres.
- 14. That a 'motorcycle stand (time limit) 30 minutes" be created on the north eastern side of Barrington Street commencing at a point 48 metres from its intersection with Athelston Street and extending in a northerly direction for a distance of 6 metres.
- 15. That the parking of vehicles be restricted to a maximum period of 30 minutes on the north eastern side of Barrington Street commencing at a point 11 metres from its intersection with Athelston Street and extending in a southerly direction for a distance of 52.5 metres.
- 16. That the parking of vehicles be restricted to a maximum period of 30 minutes (at any time) on the south western side of Barrington Street commencing at a point 27 metres from its intersection with Frankleigh Street and extending in a northerly direction for a distance of 12 metres.

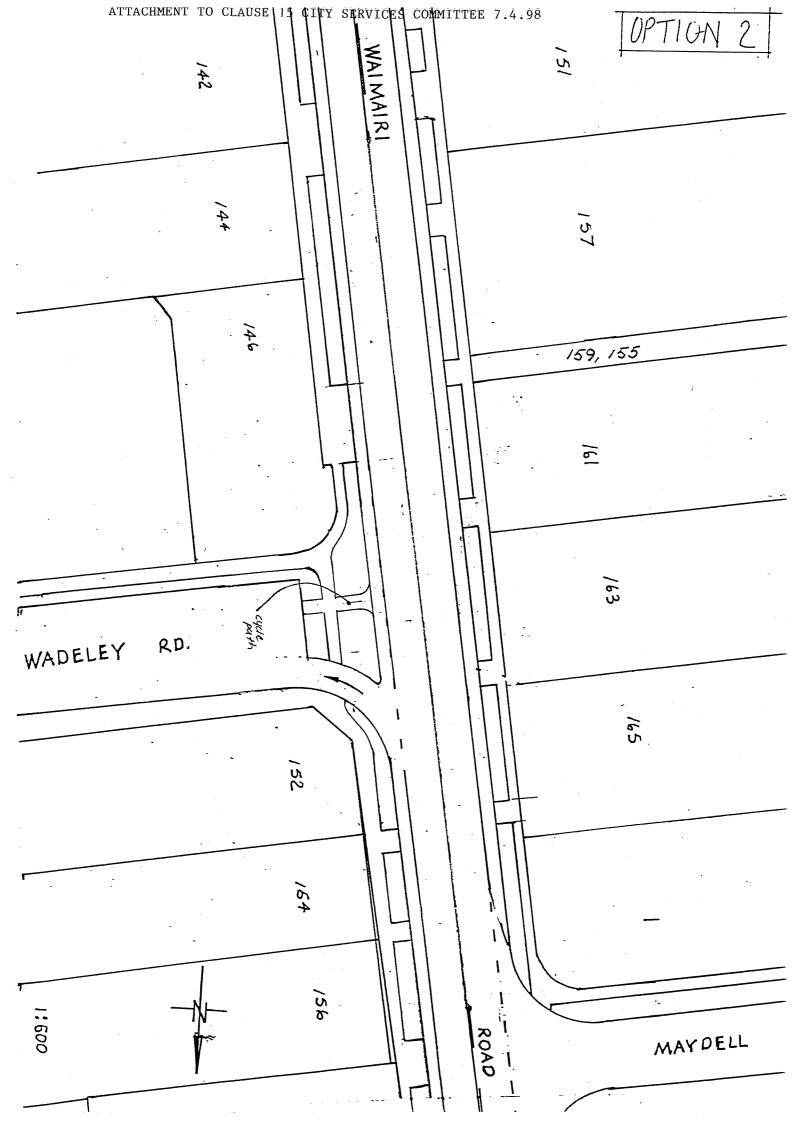
- 17. That the parking of vehicles be restricted to a maximum period of 30 minutes (at any time) on the northern side of Milton Street commencing at a point 8 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 36 metres.
- 18. That the parking of vehicles be restricted to a maximum period of 30 minutes on the northern side of Athelston Street commencing at a point 6 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 24 metres.
- 19. That the parking of vehicles be restricted to a maximum period of 30 minutes on the northern side of Athelston Street commencing at a point 41.5 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 12 metres.
- 20. That the parking of vehicles be restricted to a maximum period of 30 minutes on the northern side of Athelston Street commencing at a point 79 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 48 metres.
- 21. That the parking of vehicles be restricted to a maximum period of 30 minutes on the southern side of Athelston Street commencing at a point 73.2 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 72 metres.
- 22. That a 'bus stop' be installed on the northern side of Athelston Street commencing at a point 127 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 18 metres.
- 23. That a 'taxi stand' be created on the northern side of Athelston Street commencing at a point 189 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 35 metres.
- 24. That a 'motorcycle stand (time limit) 30 minutes' be created on the southern side of Athelston Street commencing at a point 64.8 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 2 metres.
- 25. That the parking of vehicles be restricted to a maximum period of 30 minutes on the southern side of Athelston Street commencing at a point 47 metres from its intersection with Barrington Street and extending in an easterly direction for a distance of 12.5 metres.

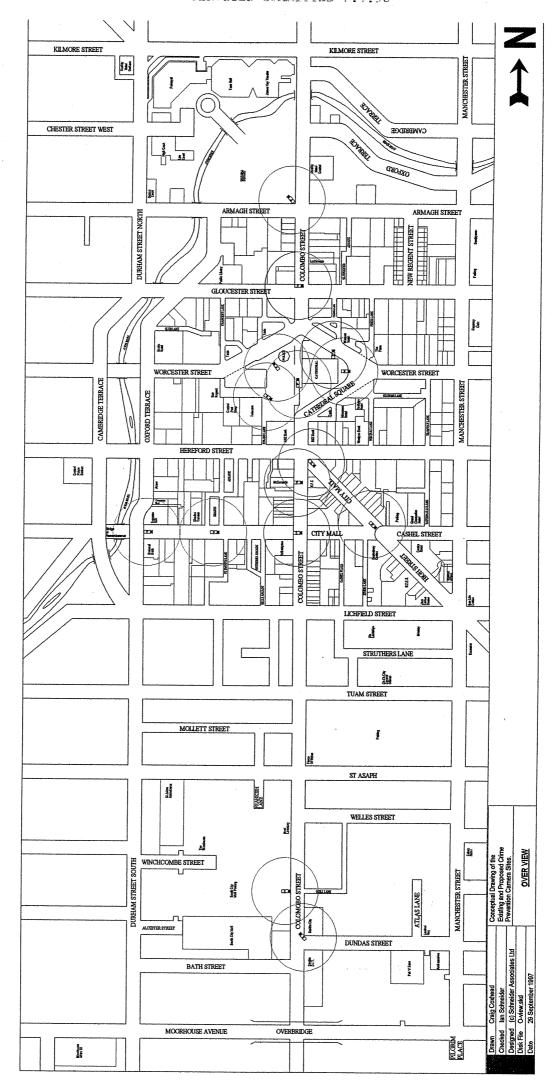














CCTV ANALYSIS FOR THE PERIOD JULY 1996 - AUGUST 1997



8 October 1997

Senior Sergeant F Wood
Beat Section
CHRISTCHURCH

RE: CCTV CAMERAS

I have carried out an analysis, in respect of the above matter, for the period July 1996 to August 1997 (the approximate time the cameras have been in operation).

Using statistics, from March 1994 to June 1996, I obtained a "Trend" (a calculated figure stating the monthly increase or decrease in reported offences based on the "best fit" line through the available data) and used this to predict levels of reported offending for the months July 1996 to August 1997.

At Appendix A I have graphed the predictions against the actual reported offending for Violence, Disorder, Unlawful Taking, Theft X Car and Property Damage. (The graphs relate to the totals of those sectors in which a Camera is sited)

At Appendix B I have graphed the totals for the Camera Sectors as well as the totals for the Control Sectors - I have also inserted a "Trend Line" for both. In all five cases it can be seen that the "trend" is downwards for both the Camera and Control Sectors - the greater downward trend in all cases being evident in the Control Sectors.

At Appendix C I have graphed the totals for the Camera and Control Sectors for the period March 1994 to August 1997 - this is purely to enable you to see how the current level of reported offending compares with the period as a whole.

In conclusion it is fair to say that reported offending, in the five offence categories studied, has declined in both the Camera and Control Sectors. There is nothing to suggest that the downward trend, in the Camera Sectors, is not consistent with the downward trend evidenced in the Control Sectors - there is also nothing to suggest the downward trend is as a result of the Cameras. The Sectors in which the Cameras are located are 300m X 300m square and therefore cover an area much larger than each camera monitors - the result being that it is difficult to establish the actual "deterrent" area. The only significance is that reported offending has not risen during this period.

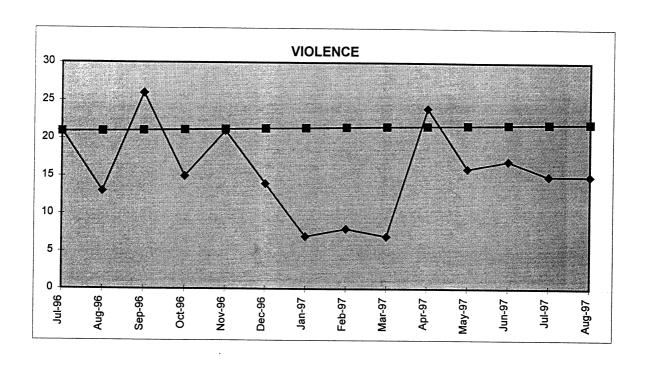
I hope this information is of use to you.

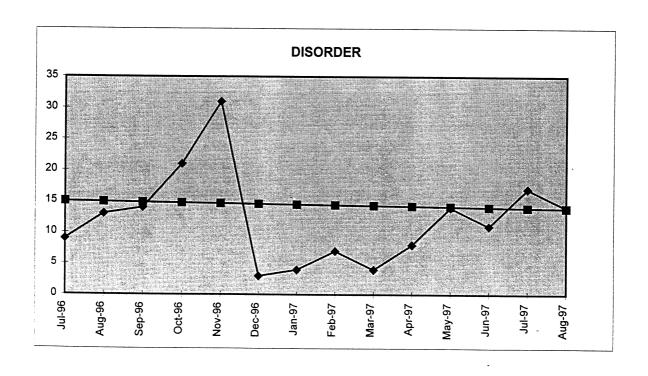
Chris Unsted

Detective Sergeant: Manager Intel Section

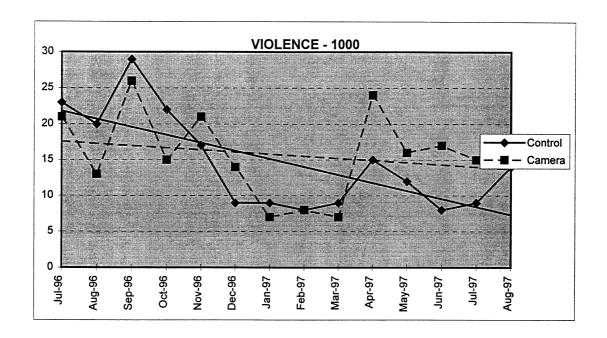
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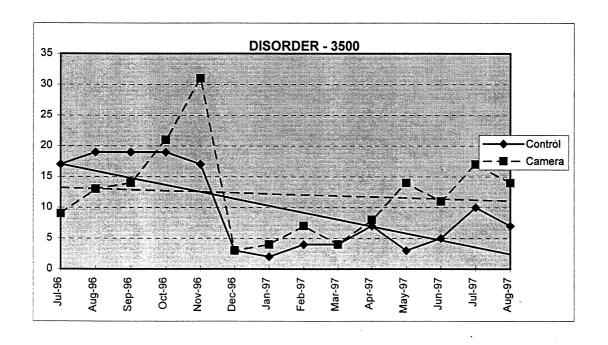
APPENDIX A: Predictions v Actual reported offending.

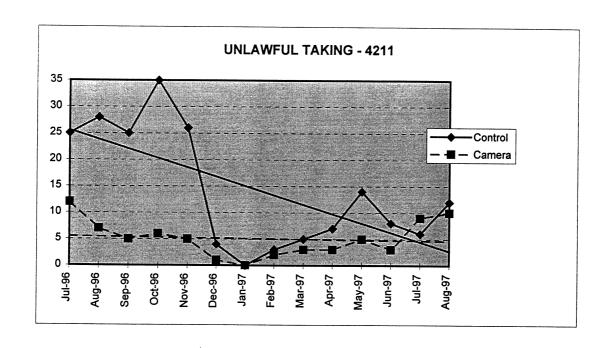


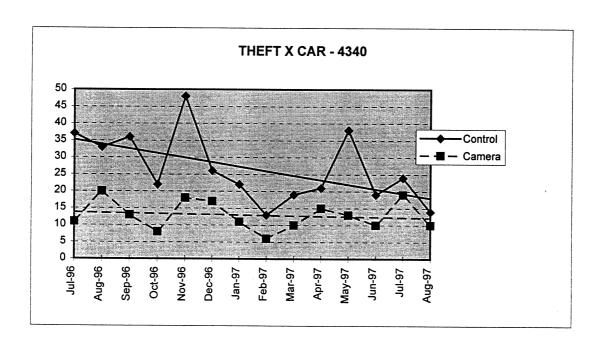


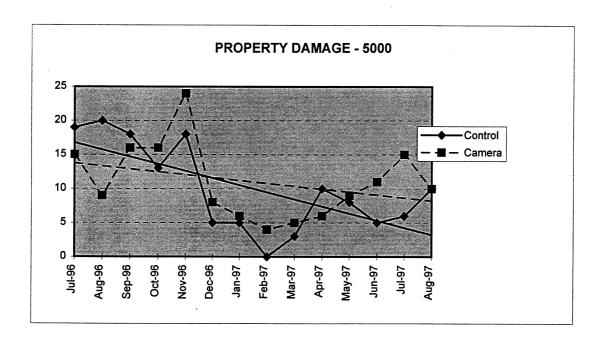
APPENDIX B : Camera v Control Sectors.



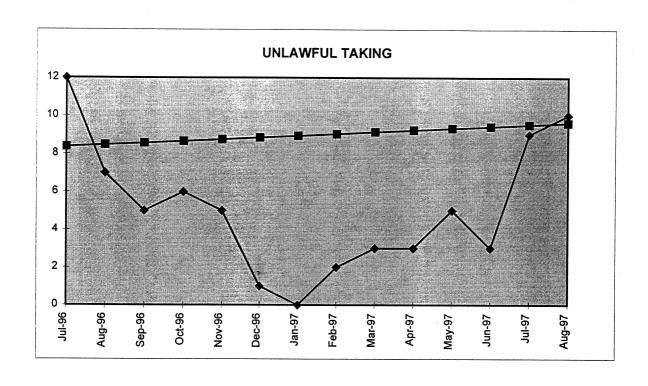


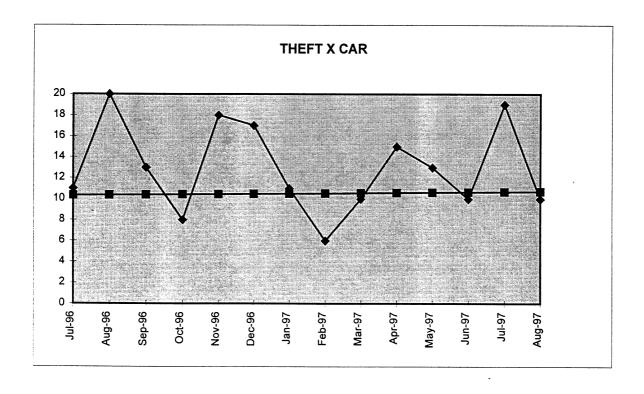


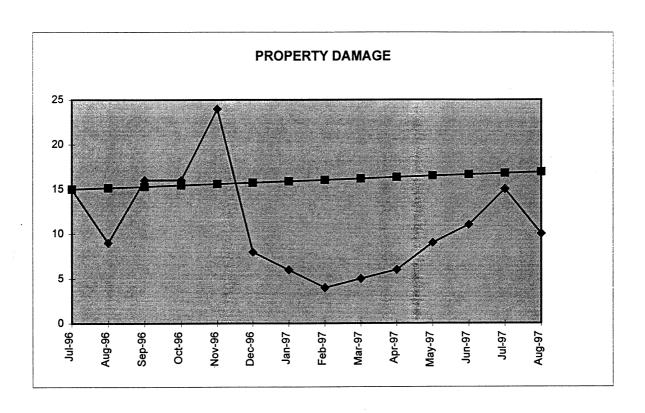


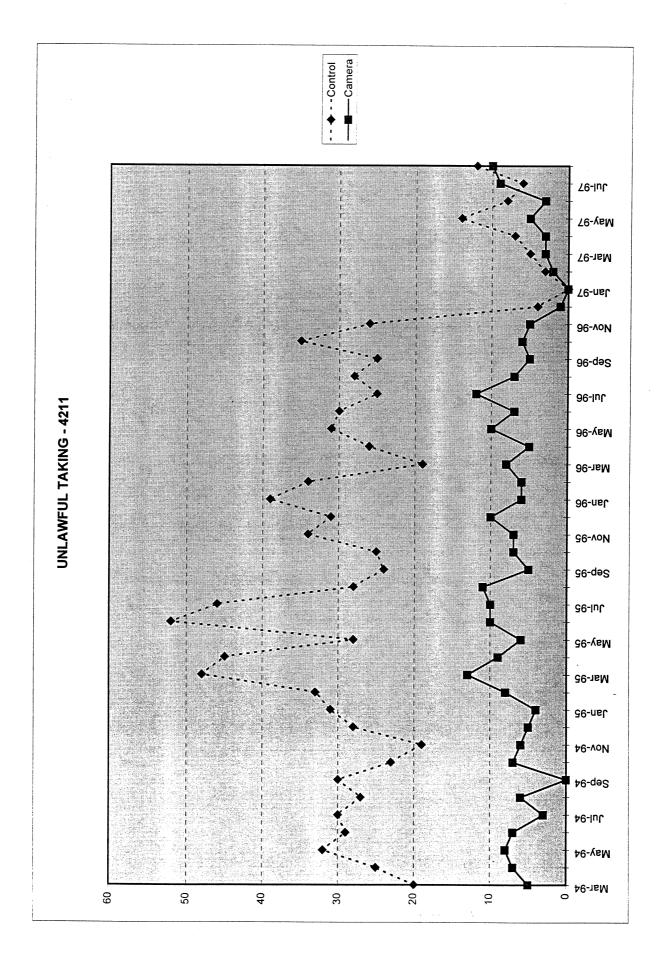


APPENDIX C: Total Reported Offending.

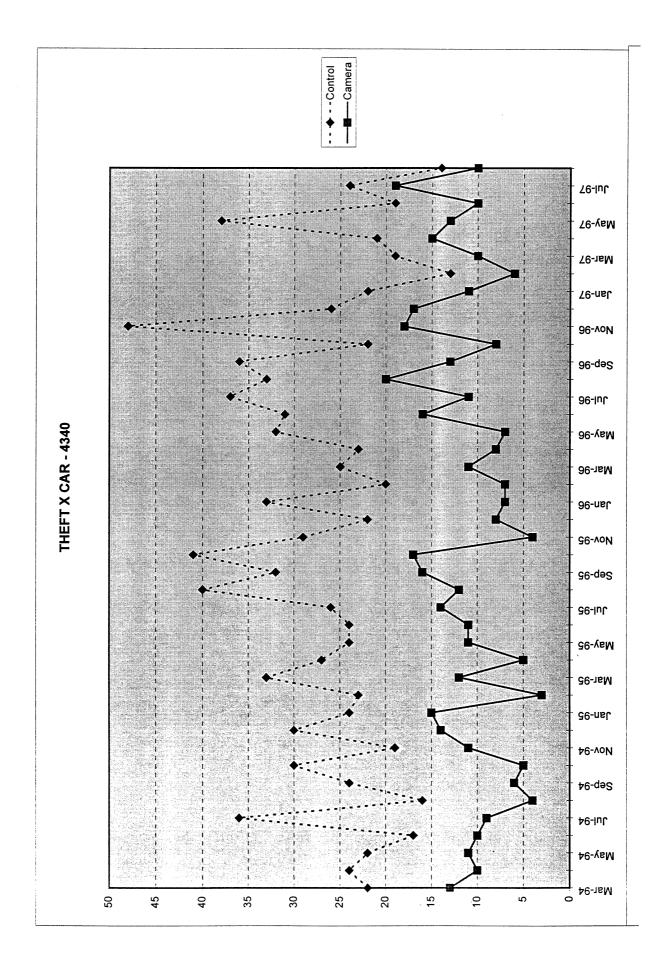


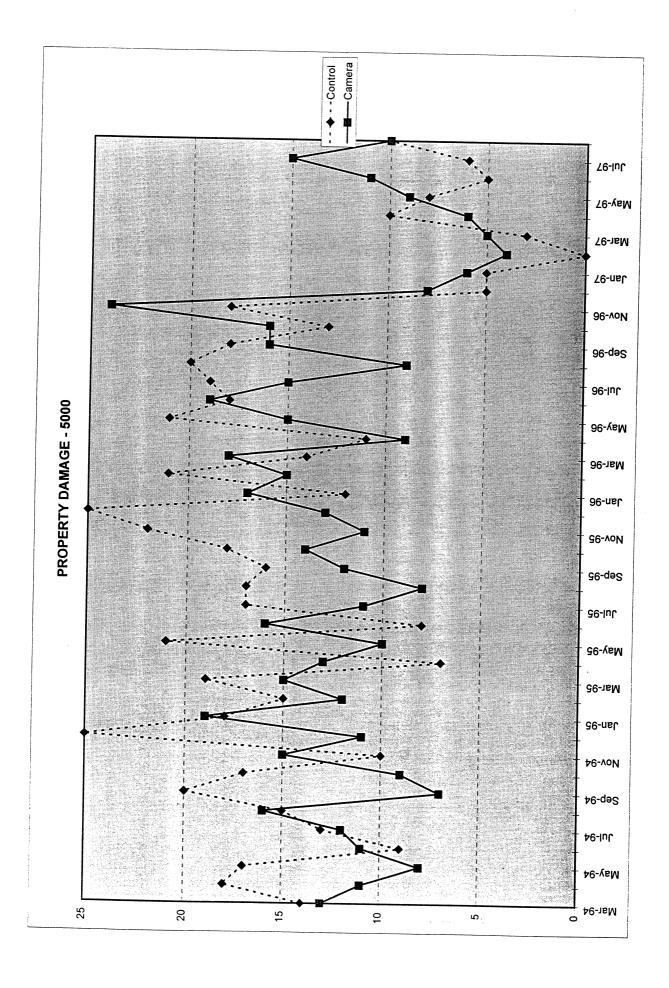


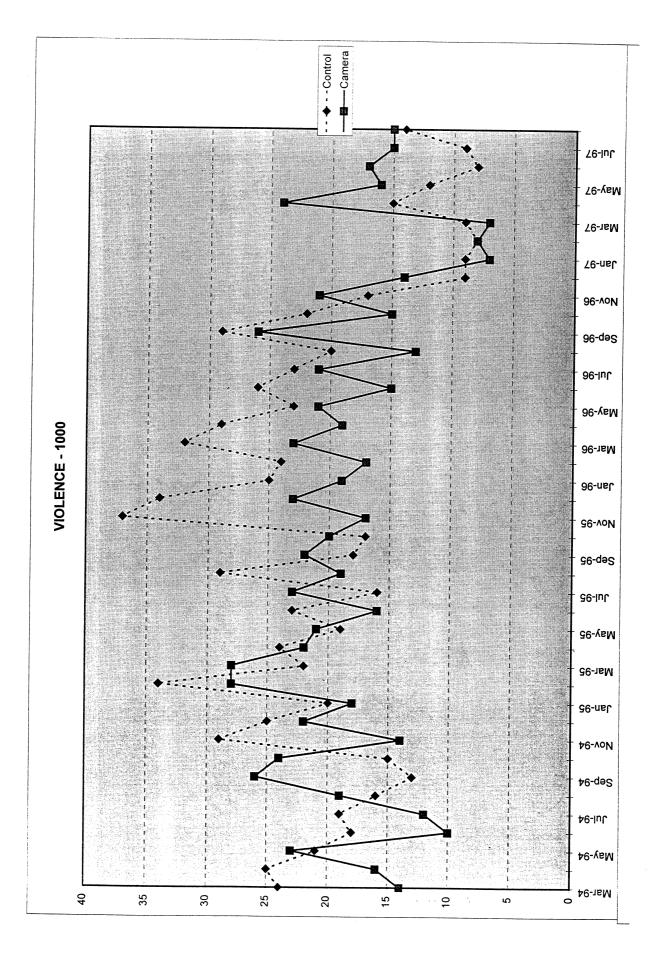


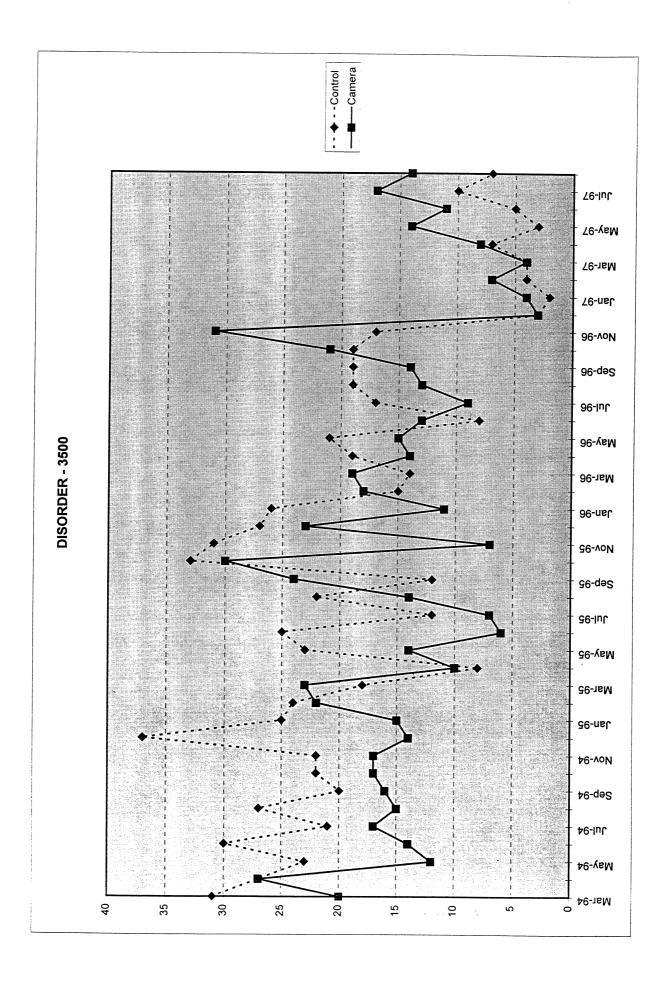


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A statistical survey of the CCTV experiment in Christchurch

G C Naylor

1 This Report considers whether the Closed Circuit Television Cameras installed in the Central City Area have affected the level of crimes reported to the Police, and if so in which direction. There are two measures available to us, absolute levels compared with the levels which may be expected from past experience, and the relative levels in the CCTV "cells" compared with a matching set of control cells.

Background.

- 2 In January 1996 I was retained by Superintendent Dalziel to examine the patterns of selected crimes in Christchurch. Following on from that work I was invited to join the Advisory Committee for the Crime Prevention Camera System, and asked to prepare a statistical base from which to measure results.
- 3 The Police assign crimes to geographic cells which measure about 300m by 300m in the City, based on the report of the Police Officer dealing with each crime. (Although, in the nature of things, very occasionally the allocations are not always precisely attributed to the correct cell - a fight may continue over a cell boundary for example, or a simple human mistake may mean a wrong assignment - I am certain that such errors, if there are any, do not invalidate the conclusions reached.) Four cells were judged to be "covered" by the cameras, even though only parts of these cells could be scanned, which inevitably affects the power of the statistics to reflect criminal activity in the whole of each cell. To quote from the Original Memorandum of Understanding in mid 1996, "It is acknowledged by all parties that the present Police CAD grids are not ideally suited to the individual camera sites and that statistical gathering covers a larger area than that covered by individual cameras. This may impact on the resultant analysis". However in order to increase the sensitivity of any analyses, with advice from the Police, I examined crime rates in a number of other cells, eventually deciding on a more or less matching set of four "control cells" against which to judge results in the cells deemed to be covered by the cameras. The statistics used in this report have been collated and calculated by Detective Sergeant Chris Unstead, whose help I gladly acknowledge. DS Unstead has seen a copy of this report.
- 4 Figures from November 1993 to January 1996 were used both to compute long term trend lines and, from May 1994, to compare the two groups of cells, in particular the trend of the share of the combined four test cells as a percentage of crimes in all eight cells. Data for five crimes nominated by the Police, namely, Violence, Disorder, Unlawful Taking, Theft ex-Car and

Property Damage were used. For the total of all five crimes, the overall share of the test cells was around 35% - lower than the hoped for 50% due to low figures for Unlawful Taking of Motor Cars and of Theft ex-Cars in the central zones. There was however, a good deal of variation from month to month around the trend lines for the absolute levels of each of the five crimes, and this makes it more difficult to be certain of any deduced outcomes. But the variation about the *trends* was less, especially for all five crimes combined.

- 5 These long term trends have been used in this report, together with the latest figures which commented on below.
- 6 Before doing so however, it is necessary to consider possible causes for any observed effects. For example, if the cameras are effective in reducing reported levels of crime in the test cells, can we be sure the crimes have not simply migrated to unobserved areas? Or if there have been fewer reported crimes in the CCTV cells, is this perhaps merely a reflection of a more widespread movement? Or if the trend of the share of the five crimes in the CCTV cells as a percentage of all eight cells is upwards, is it that the initial share of 35% simply makes a reduction more difficult to achieve?

Results

- 7 Data for the fourteen months the cameras have been operating, from July 1996 to August 1997, have been analysed, and compared with the long term trend.
- 8 The *absolute* number of crimes reported in the CCTV cells has been lower than the long term trend, although of course the picture is not without its uncertainties. In the fourteen months surveyed, the number of months in which each type of crime reported to the Police has been below the long term trend has been:

Type of crime	Number of months below long term trend
Violence	10
Disorder	9
Unlawful Taking	12
Theft ex-Car	5
Property Damage	10

Of course such a simple counting of the number of months below trend hides any measure of the size of such shortfalls. In fact crimes of Violence have dropped by a quarter from the precamera level of around 20 per month to around 15 per month; crimes of Disorder have also been lower than the trend but only marginally so (and with a worrying recent upturn); Unlawful Taking of cars fell sharply for the seven months to January 1997 but has since turned equally sharply upwards; Thefts ex-Cars has been slightly above the trend while Damage to Property has been well below trend.

9 As stated in paragraph 1, we can also express the level of crime in the test cells as a proportion of the crimes in all eight cells to assess the effect of the cameras. For each of the five crimes measured, there has been an increase in the share of the CCTV cells. This could however reflect their lower shares originally. For example unlawful taking of cars has remained at the low level of about five per month in the test cells while in the control group the number has fallen from around 25 per month for the second half of 1996 to about 10 per month for the six months to August 1997. Clearly the numbers in the test cells simply could not fall as sharply meaning their share has to rise. For each of the five designated crimes the share of the four CCTV cells combined has been compared to their trends since May 1994.

Type of crime	Long term trend of share	Trend of share since introduction of CCTV areas
Violence Disorder Unlawful Takings	Steady at 45% Steady at 40% Slightly upwards towards 18%	Rising about 1% a month Rising about 1% a month Rising about 1% a month
Theft ex-Car Property Damage	Steady about 25% Steady about 42%	Rising by less than 1% a month Rising about 1% a month

Conclusion

10 From the bare statistical evidence I am confident that absolute levels of reported crime in the areas covered by the CCTV cameras has reduced, although there is a fairly similar reduction in the adjacent "control" areas. Thus it is possible that the influence of the cameras extends at least a little beyond the immediate areas they cover. Evidence from other sources supporting this view will obviously increase my confidence in this conclusion. For the reasons in paragraph 6, it is difficult to be certain that the cameras have *caused* these changes, but it seems likely.

AS/DG1616

Updated 24.11.97

MEMORANDUM OF UNDERSTANDING

Between

The Christchurch City Council

New Zealand Police (Christchurch)

STATEMENT OF PURPOSE

The Christchurch Police and the Christchurch City Council are installing closed circuit crime prevention cameras in the central city area. The objective is to ensure that members of the community will know that the central city is a safe place to be. The main focus will be on disorder, violence and wilful damage.

ACCOUNTABILITY

The Christchurch City Council will be responsible for the capital outlay, installation and maintenance of the cameras, in the central city area. They will also be responsible for line costs from the cameras to the Christchurch Central Police building in Hereford Street.

The Police will be responsible for the capital outlay, installation and maintenance of monitors and lines in the Christchurch Police Station. They will accept responsibility for the training of Police and volunteer staff and the overall operation of the cameras taking into account advice received from the Advisory Committee. All items purchased by the Council and Police will remain the property of, and responsibility of, the respective organisations.

INSPECTION BY INTERESTED PARTIES

The Police will facilitate visits by interested parties to the monitoring area within the Christchurch Police Station. Visits can be arranged at a mutually convenient time through the officer in charge of either the Beat Section or the O/C Reception Groups especially concerned with personal privacy and civil liberties issues are welcome. A record of such visits will be kept.

It must however be accepted that viewing of the monitoring area will only be of a general nature and that in order to protect issues of privacy/subjudicae the capture of identified persons on film should not be seen by those visiting the Police Station.

PUBLICITY

The Council and the Police will jointly publicise the development and ongoing progress of the project.

Police and Council will jointly provide annual reports concerning the operation of the cameras.

SIGNS

The Council will place and maintain public signs in the vicinity of the cameras, publicising their existence. Those signs will be approximately 750mm square. Public notices in local newspapers will also inform members of the public of the operation and location of crime prevention cameras.

ADVISORY COMMITTEE

The Christchurch City Council and Police have jointly set up a committee to overview and support the operation of the crime prevention cameras. This committee should meet bimonthly. The chairperson is elected by the committee.

The committee should include a representative of the Council, Police, an appropriate technical expert, a lawyer, a statistician, a member of civil liberties, and a reputable resident of Christchurch.

The committee will give advice to the Council and Police concerning the operation of the cameras, on future developments and code of practice requirements.

CODE OF PRACTICE

1 Volunteer Staff

Volunteers are selected on their competency to monitor events and operate the equipment. They must be persons of honesty and integrity and able to ensure confidentiality of the information they may observe or learn about. They must be compatible with other staff and able to communicate well with Police working in the Control Room.

Their selection will be by way of application to the officer in charge of the Beat Section.

Volunteer staff will be required to sign a statement of confidentiality and provide character references.

2 Training

The dispatchers in the Police Communication Centre Room will receive training on the operation and Code of Practice to be applied to the operation of the cameras.

Civilian volunteers will be similarly trained by the Police. A position description is attached as Appendix A.

Breaches of the Code of Practice will be considered a disciplinary matter within the Police and will be dealt with accordingly. Breaches of the Code of Practice by civilian volunteers could result in their removal from office.

3 Records

A log book will be kept by volunteers monitoring the cameras. The dates and hours of duty worked by volunteers will be recorded in that book. Likewise the times, dates and types of incidences observed on camera (including the camera number) and resulting Police action will be recorded.

4 Security and Retention of Tapes

All monitor tapes will be stored for one month.

The Crime Prevention Camera Monitoring Room on Level 3 will incorporate a dual tape recording system. The master tape which is operating on a traditional VCR may be produced and played in Court. the "Search" tape operating in a DAT recording system may be used for:

- A Playback to suspect.
- B Playback to Defence Counsel
- C Evidence preparation.
- D Recording of copy tape.
- E Recording of edited copy tape.
- F Photograph production.
- G Training purposes.

Both the VCR (exhibit) and the DAT (search) tapes will be changed daily, Monday to Friday, at 0900 hours, by the Exhibits Officer, but

during the weekends and on public holidays the tapes will be changed by selected Beat staff or the Communications Room Senior Sergeant.

Each VCR(exhibit) tape shall be sealed with the label provided and when changed by persons other than the Exhibits Officer, shall be immediately placed in the provided "drop box".

DAT (search) tapes shall be placed in the secure cabinet in the Monitor Room and may be accessed only by selected Beat and Intell staff for the purpose of playback in accordance with A-G above. All transactions must be entered in the DAT (search) log book.

Copy Tapes

A copy will normally be made when:-

- A. A tape is forwarded out of district for further inquiry.
- B. There is a request from Defence Counsel or suspects.
- C. One is required by the Crown Solicitor and/or the Judiciary.

Lost or Misplaced

If a working tape is either lost or misplaced and is required for one of the above purposes (A-G), a copy may be produced from the master tape. In such circumstances, the master tape must be copied with authority of and in the presence of a Commissioned Officer, who will endorse an appropriate certificate. The master tape must be returned promptly to the Exhibit Room.

5 Control and Operation of Cameras

Operators of camera equipment must act with the utmost propriety.

Fixed cameras should be focused on known trouble spots.

The tracking or zooming in with variable cameras on any member of the public must not be done in a gratuitous or unreasonable manner.

All operators are to be aware, as a matter of course, that their camera operation shall be subject to audit and that they may be called upon to justify their interest in a member of the public.

Only Police and volunteers that are so tasked shall have access to monitor operation controls.

Operators shall not allow cameras to view into private residence with the following exceptions:

- * private residences may come into view as part of a wide angle or long shot or as a camera is panning past them; and
- * a camera operator may allow a private residence to remain in view at a level that allows the identification of persons or actions only when that operator has significant justification for doing so (eg reasonable suspicion that a serious offence is taking place).

6 Use of information collected

Information collected by the camera:

- a will be used for the deterrence, or immediate detection, of criminal offences which occur in the particular area in view of the cameras;
- b may be used, with the prior approval of the O/C Beat or of a member of police of the rank of senior sergeant or above, for the following related purposes:
 - inquiries relating to the investigation and prosecution of other criminal offences;
 - training of police and volunteers; and
 - research eg, the nature of street offences, foot or vehicular traffic systems, or evaluation of the operation of particular camera systems;

7 Access to information by individual concerned

An individual who is the subject of filming by a video has a right to access and view the tape where that information is readily retrievable (as it would be in the case of an identified offender).

Access can only be refused on one of the grounds set out in Part IV of the Privacy Act. Suspects should be told of the right of access to the video at the first point of any interview.

METHODOLOGY OF EVALUATION

1. The cameras initially will measure crime statistics collected on the Police Computer Assisted Dispatch (CAD) grids, references:

C18, C22 and C23.

Areas suitable for comparison will be references:

C35, C30, C11, CPH.

- 2. The initial measurement period will be from 1 July 1996 to 30 June 1997.
- 3. It is acknowledged by all parties that the present Police CAD grids are not ideally suited to the individual camera sites and that statistical gathering covers a larger area than that covered by the individual cameras. This may impact on the resultant analysis.
- 4. It is also acknowledged that with the development of new police computer projects the Integrated Crime & Information System (INCIS), and the Communication and Resource Deployment System (CARD) may impact on the statistical analysis.
- 5. To aid the analysis of the effectiveness or otherwise of the cameras, a list of each incident observed and actioned by each camera will be gathered monthly from the CAD system. This should provide a comprehensive list of `catches' by the camera.
- 6. The committee having oversight of the project will remain vigilant as to public opinion.

MONITORING: GENERAL

A continuous monitoring point is set up in a designated room on Level 3 of the Christchurch Central Police Station.

This monitor point will be manned by specially selected and trained civilian volunteers on a 12 month trial basis. In operational matters the volunteers come under the control of the Communication Room Senior Sergeant. For administrative purposes they will be responsible to the Senior Sergeant in Charge of the Beat Section, who will arrange suitable rosters, duties, staff and training.

Cameras will also be monitored from the Communications Room, Level 3 of the Christchurch Central Police Station.

It is recognised that the ability to monitor the crime prevention cameras at this point will depend very much on work activity in the primary area of dispatching. This means that when the dispatcher is otherwise occupied the volunteer could bring to his/her attention specific behaviour requiring Police attention. That person in conjunction with the No 1 city dispatcher will ensure that matters requiring attention are addressed as and when they occur. It must however be recognised that it may not be possible for Police to attend each and every specific incident identified on the cameras. This will very much depend on policing priorities existing at the time. Nor may it be possible to investigate each and every offence identified on the cameras.

CAMERAS

Seven sites have initially been chosen for the placement of cameras in fixed positions. They are :

- 1 Gloucester/Colombo Street North West
- 2 Cenotaph/Visitors Centre, Cathedral Square
- 3 Hereford/Colombo Street South East
- 4 McDonalds/Colombo Street
- 5 City Mall (Cashed Street)/Colombo Street South West
- 6 & 7 South City, Colombo Street

Cameras are capable of zoom, tilt, pan and are in full colour.

There is no provision for sound.

Signed on behalf of the Christchurch City Council by :

Signed on behalf of the Christchurch Police by:



24 November 1997

CHRISTCHURCH DISTRICT POLICE POLICY: CRIME PREVENTION CAMERAS

1 <u>INTRODUCTION</u>

The Christchurch City Council supported by the Christchurch Police and other interested groups are installing closed circuit television "crime prevention" cameras in the central city area which will be monitored from the Christchurch Central Police Station.

The operation of the cameras will comply with the national guidelines as set out in "Policy Pointers", Ten-One Police Magazine, 2 May 1995 (1995/9).

2 OBJECTIVE

The objective of the camera installation is to ensure members of the community feel safe and secure when visiting the central city area of Christchurch. Aligned with this stated objective is the aim of effecting a reduction in the incidence of criminal offending through the monitoring of selected areas.

3 ACCOUNTABILITY

The Christchurch City Council will be responsible for the capital outlay, installation and maintenance of the cameras, initially at five locations in the central city area. They will also be responsible for line costs from the cameras to the Christchurch Central Police building in Hereford Street.

6.2 **Training**

The dispatchers in the Police Southern Communication Centre will receive training on the operation and Code of Practice to be applied to the operation of the cameras.

Civilian volunteers will be similarly trained by the Police. A position description is attached as Appendix A.

Breaches of the Code of Practice will be considered a disciplinary matter within the Police and will be dealt with accordingly. Breaches of the Code of Practice by civilian volunteers could result in their removal from office.

6.3 Records

A log book will be kept by volunteers monitoring the cameras. The dates and hours of duty worked by volunteers will be recorded in that book. Likewise, record sheets will be filled out and retained of the times, dates and types of incidences observed on camera (including the camera number) and the resulting Police action.

6.4 **Security and Retention of Tapes**

All monitor tapes will be stored for one month.

The Crime Prevention Camera Monitoring Room on Level 3 will incorporate a dual tape recording system. The master tape which is operating on a traditional VCR may be produced and played in Court. The "search" tape operating in a DAT recording system may be used for:-

- A. Playback to suspect
- B. Playback to Defence Counsel
- C. Evidence preparation
- D. Recording of copy tape
- E. Recording of edited copy tape
- F. Photograph production
- G. Training purposes

Both the VCR (exhibit) and the DAT (search) tapes will be changed daily, Monday to Friday, at 0900 hours, by the Exhibits Officer, but during the weekends and on public holidays the tapes will be changed by selected Beat staff or the Communications Room Senior Sergeant.

Each VCR (exhibit) tape shall be sealed with the label provided and when changed by persons other than the Exhibits Officer, shall be immediately placed in the provided "drop box".

DAT (search) tapes shall be placed in the secure cabinet in the Monitor Room and may be accessed only by selected Beat and Intell staff for the purpose of playback in accordance with A-G above. All transactions must be entered in the DAT (search) log book.

Copy Tapes

A copy will normally be made when:-

- A. A tape is forwarded out of district for further inquiry.
- B. There is a request from Defence Counsel suspects.
- C. One is required by the Crown Solicitor and/or the Judiciary.

Lost or Misplaced

If a DAT (search) tape is either lost or misplaced and is required for one of the above purposes (A-G), a copy may be produced from the VCR (exhibit) tape. In such circumstances, the exhibit tape must be copied with authority of and in the presence of a Commissioned Officer, who will endorse an appropriate certificate. The exhibit tape must be returned promptly to the Exhibit Room.

6.5 Control and operation of cameras

Operators of camera equipment must act with the utmost propriety.

Fixed cameras should be focused on known trouble spots.

The tracking or zooming in with variable cameras on any member of the public must not be done in a gratuitous or unreasonable manner.

All operators are to be aware, as a matter of course, that their camera operation shall be subject to audit and that they may be called upon to justify their interest in a member of the public.

Only Police and volunteers that are so tasked shall have access to monitor operation controls.

The Police will be responsible for the capital outlay, installation and maintenance of monitors and lines in the Christchurch Police Station. They will be responsible for the training of Police and volunteer staff and the overall operation of the cameras taking into account advice received from the Advisory Committee. The Police and the City Council will have joint responsibility for publishing annual reports outlining the effectiveness of the project.

4 APPLICATION OF POLICY

This policy and protocol applies only to closed circuit television cameras installed on a long-term basis in public places for a general crime prevention purpose.

5 **CONSULTATION**

There has been consultation with the community and interested parties through the widespread publicity in local papers. This will be continued.

6 CODE OF PRACTICE

6.1 Volunteer Staff

Volunteers will be selected on their competency to monitor events and operate the equipment. They must be persons of honesty and integrity and able to ensure confidentiality of the information they may observe or learn about. They must be compatible with other staff and able to communicate well with Police working in the Control Room.

Their selection will be by way of application to the officer in charge of the Beat Section.

Volunteer staff will be required to sign a statement of confidentiality and provide character references.

Operators shall not allow cameras to view into private residences with the following exceptions :

- * private residences may come into view as part of a wide angle or long shot or as a camera is panning past them; and
- * a camera operator may allow a private residence to remain in view at a level that allows the identification of persons or actions only when that operator has significant justification for doing so (eg reasonable suspicion that a serious offence is taking place).

6.6 Use of information collected

Information collected by the camera:

- a will be used for the deterrence, or immediate detection, of criminal offences which occur in the particular area in view of the cameras;
- b may be used, with the prior approval of the O/C Beat or of a member of Police of the rank of Senior Sergeant or above, for the following related purposes:
 - inquiries relating to the investigation and prosecution of other criminal offences;
 - training of Police and volunteers; and
 - research eg, the nature of street offences, foot or vehicular traffic systems, or evaluation of the operation of particular camera systems;

6.7 Access to information by individual concerned

An individual who is the subject of filming by a video has a right to access and view the tape where that information is readily retrievable (as it would be in the case of an identified offender).

Access can only be refused on one of the grounds set out in Part IV of the Privacy Act. Suspects should be told of the right of access to the video at the first point of any interview.

7 <u>CAMERA LOCATION</u>

7.1 The sites for camera installation have been carefully chosen in consultation with the Christchurch City Council and other interested parties. It is accepted that the present chosen sites will change with time and development of the city.

Camera Sites

- a Gloucester/Colombo Street North West
- b Cenotaph/Visitors Centre, Cathedral Square
- c Hereford/Colombo Street South East
- d McDonalds/Colombo Street
- e City Mall (Cashel Street)/Colombo Street South West
- f South City Colombo Street West
- g South City Colombo Street East

Cameras will be capable of zoom, tilt, pan and be in colour. There is no provision for sound.

8 OPERATION TIMES

Cameras will be "live" on a 24-hour basis. When not being physically monitored they will be automatically recording to tape.

Initially, cameras will be physically monitored from 1900 hours to 0100 hours on Thursday, Friday and Saturday nights.

Communications Room staff on Level 3 also have an ability to monitor specific cameras and may do so when the opportunity arises or when they need to look at a particular area.

9 MONITORING: GENERAL

A 24-hour monitoring room is set up on Level 3 of the Christchurch Central Police Station.

This monitor room will be manned by specially selected and trained civilian volunteers on a 12 month trial basis. For operational matters the volunteers will be responsible to the Control Senior Sergeant. For administrative purposes they will be responsible to the Senior Sergeant in Charge of the Beat Section, who will arrange suitable rosters, duties, staff and training.

Another monitoring point will be in the Southern Communication Centre of the Christchurch Central Police Station, Level 3.

It is recognised that the ability to monitor the crime prevention cameras at this point will depend very much on work activity in the primary area of dispatching. This means that when the dispatcher is otherwise occupied the volunteer could bring to his/her attention specific behaviour requiring Police attention. That person in conjunction with the No 1 city dispatcher will ensure that matters requiring attention are addressed as and when they occur. It must however be recognised that it may not be possible for Police to attend each and every specific incident identified on the cameras. This will very much depend on policing priorities existing at the time. Nor may it be possible to investigate each and every offence identified on the cameras.

10 ADMINISTRATION OF SYSTEM

The Inspector (referred to as the "Controlling Officer") holding the Crime Prevention Camera portfolio will be responsible for the overview of:

- * Installation and maintenance of equipment at Central Police Station.
- * Security of the installation and tapes.
- * In liaison with the 2I/C, conduct a general ongoing review of, and when required, provide specific reports on the need or justification for continued operation of the cameras.

The Senior Sergeant in Charge of Beat Section is appointed as 2I/C and shall be responsible for:

- * Recording and reporting on relevant statistics, other data and significant incidents.
- * Liaison with local authority, the Advisory Committee and other interested parties.
- * Overview of the installation and maintenance of equipment and signs on the street.
- Assisting in the preparation of the Annual Report.
- * In consultation with the Council, publishing required public notices.
- * In liaison with the Controlling Officer, conduct a general ongoing review of, and when required, provide specific reports on the need or justification for continued operation of the cameras.

11 **PUBLICITY**

The Council and the Police will jointly publicise the development and ongoing progress of the Crime Prevention Cameras.

Police and Council will provide an annual report concerning the operation of the cameras.

12 SIGNS

The Council will place and maintain public signs in the proximity of the cameras, publicising their existence. Those signs will be 750mm square. Public notices in local newspapers will also inform members of the public of the operation and location of crime prevention cameras.

13 **AUDITING**

The Controlling Officer is hereby appointed as the Internal Review Officer to audit the use and security of the cameras, monitors and tapes.

14 INSPECTION BY INTERESTED PARTIES

The Police will facilitate visits by interested parties to the monitoring area within the Christchurch Police Station. Visits can be arranged at a mutually convenient time through the Officer in Charge of either the Beat Section or the Control Room. Groups especially concerned with personal privacy and civil liberties issues are welcome.

It must however be accepted that viewing of the monitoring area will only be of a general nature and that in order to protect issues of privacy/sub judicae the capture of identified persons on film, should not be seen by those visiting the Police Station.

15 ADVISORY COMMITTEE

The Christchurch City Council and Police have jointly set up a committee to overview and support the operation of the crime prevention cameras. The committee will meet bi-monthly or as required. The chairperson will be elected by the committee.

The committee should include a representative of the Council, Police, an appropriate technical expert, a lawyer, a statistician, a member of civil liberties, and a reputable resident of Christchurch.

The committee will give advice to the Council and Police concerning the operation of the cameras, on future developments and code of practice requirements.

All items purchased by the Council and Police will remain the property of, and the responsibility of, the respective organisation.

Graham Clewer Acting District Commander

JOB DESCRIPTION

POSITION: CRIME PREVENTION CAMERA - VOLUNTEER MONITORS

Requirements:

- 1. To work on Level 3 of the Christchurch Central Police Station in the Monitoring Room as rostered.
- 2. To observe and monitor the Crime Prevention closed circuit television cameras positioned in the central city area of Christchurch.
- 3. To record in writing in the Occurrence Book any incident that occurs, the time, date and place, the nature of the incident and the resulting Police action. The Occurrence Book is to be signed by the volunteer in the place provided.
- 4. To immediately notify Police Control of any suspicious behaviour, breach of the peace or offence happening within the scope of the camera and fill in the Record Sheet provided.
- 5. All information observed or obtained by the volunteer as a result of working on the camera surveillance must remain confidential and shall not be discussed with people outside the Police.
- 6. Volunteers will be rostered to work no more than four hours on any one day and preferably only once in any two week period.
- 7. The volunteer shall be capable of accurately and legibly recording information and be able to master the camera zoom, pan and tilt controls.
- 8. Meet a required level of competency in the operation of the equipment.