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**CITY SERVICES COMMITTEE
10 MARCH 1998**

**A meeting of the City Services Committee
was held on Tuesday 10 March 1998 at 2.00 pm**

PRESENT: Councillor Denis O'Rourke (Chairman),
Councillors Carole Anderton, David Buist,
David Close, Carole Evans, Ian Howell
and Ron Wright.

APOLOGIES: Apologies for absence were received and accepted
from the Mayor and Councillors Graham Condon
and Garry Moore.

Councillor David Buist was temporarily absent
from 3.10 pm to 3.15 pm, retired at 5.05 pm and
was present for clauses 1, 3, 4, 6-8, 12 and 17.

Councillor Carole Anderton retired at 4.05 pm and
was present for clauses 1-4, 12 and 17.

Councillor Ron Wright arrived at 4.25 pm and was
not present for clauses 1-4, 6, 12 and 17.

Councillor Carole Evans retired at 5.50 pm and was
not present for clause 15.

The Committee reports that:

PART A - MATTERS REQUIRING A COUNCIL DECISION

1. DISPOSAL COST OF TYRES

RR 7186

Officer responsible Waste Manager	Author Eric Park, Solid Waste Engineer
Corporate Plan Output: Solid Waste, Burwood Landfill	

The purpose of this report is to gain approval for a short term non-acceptance of tyres for disposal at the Burwood Landfill and for a long term increase in charges for tyres to meet increased disposal costs at the landfill, as outlined in a memo to Councillors on 2 March 1998.

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BACKGROUND

Individual tyres, due to their flexibility and ability to trap gas, "float" up to the surface of a landfill even if they are buried under several metres of waste. For this reason many landfills both nationally and internationally do not accept bulk loads of tyres for landfilling. Auckland landfill operators either do not accept tyres or have set a disposal charge, approximately \$1.60 to \$2.00 per tyre (\$160 to \$380/tonne), which makes it more economic to take old tyres to a commercial tyre shredder operating in Auckland.

Until now commercial quantities of car tyres have generally been recycled by farmers covering silage pits or have been stockpiled by companies expecting to be able to develop a commercial viable re-process operation. However the silage pit option has now virtually been exhausted.

NON-ACCEPTANCE OF TYRES AND INCREASED DISPOSAL CHARGE

It is of serious concern that large quantities of tyres, currently stockpiled by private companies in Christchurch, could be brought to the landfill where no appropriate disposal option currently exists for them. For this reason a management decision was made by the Waste Management Unit to no longer accept tyres at Transfer Stations, commencing 25 February 1998 and continuing until an appropriate charge could be implemented. An increased disposal charge can be set by resolution of Council under clause 22 of Christchurch City Refuse Bylaw 1995.

In order to provide at least a short term disposal option, such as shredding and landfilling, it is proposed to begin accepting tyres again as soon as an appropriate charge can be established to cover such costs.

It is anticipated that the increased charge will provide sufficient financial incentive for commercial operators to develop alternative disposal methods, as has been the case in Auckland.

FUTURE OPTIONS

The Recovered Materials Foundation is actively investigating and discussing future options for recycling tyres with various industry groups. However, it is still necessary to provide a short term disposal option.

Mr Kevin Moreton (Economy Tyres Ltd) and Debora Milne (Budget Tyres Ltd) were in attendance at the meeting. Both claimed that the proposed charge of \$380/tonne is excessive by international standards and that the volume of tyres available for disposal in Christchurch does not justify the operation of a shredding machine. Mr Moreton commented on inspection procedures claiming that 1% to 2% of tyres imported were rejected by MAF officers and tyre importers. It was

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agreed that more control on packing of containers is required in countries of origin.

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- Recommendation:**
1. That action taken by the Waste Management Unit to prohibit acceptance of tyres at the Transfer Stations and the Burwood Landfill be endorsed and that prohibition on acceptance of tyres be continued until the new charging regime is in place.
 2. That the disposal charge for tyres be increased to \$2 per tyre or \$380/tonne for bulk loads (up from \$43.38/tonne currently), from 26 March 1998.
 3. That the RMF report further on shredding and disposal options for tyres.

2. **CONCRETE CRUSHING TRIAL AT BURWOOD LANDFILL** RR 7204

Officer responsible Mike Stockwell, Waste Manager	Author Eric Park, Solid Waste Engineer
Corporate Plan Output: Burwood Landfill	

The purpose of this report is to gain approval to conduct a concrete crushing (recycling) trial which could reduce waste going into the Burwood Landfill by up to 4,000 tonnes per annum, with the cost being met by revised hardfill disposal charges.

1. **BACKGROUND**

Late in 1997 the Waste Management Unit was approached by a private contractor, Townshend Excavating Ltd, which had acquired a machine able to crush old concrete/demolition material for use as roading or clean fill. An initial trial was unsuccessful because the material collected was poorly sorted and was therefore uneconomic to crush.

2. **PROPOSED NEW TRIAL**

It is proposed to conduct a new trial to assess the feasibility and cost effectiveness of concrete crushing at the Burwood Landfill site. (Note that hardfill taken to transfer stations is currently disposed of separately into privately owned clean-fill sites and will not be included in this trial until the results are known.)

It is proposed that gate charges will be revised to the following, giving companies a financial incentive to sort their hardfill waste:

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- **\$12/tonne for crushable concrete** (includes GST and is down \$4/tonne from \$16/tonne currently);
- **\$24.50/tonne for unusable hardfill** (includes GST and is up \$5.10/tonne from \$19.40/tonne as in the 1998/99 Draft Corporate Plan);

The revised charges are structured to generate the same amount of revenue as currently collected, assuming the same amount of hardfill (10,000 tonnes per year) comes into the landfill, while at the same time providing a cost incentive for useable crushable material. If the trial is extremely successful with many people taking advantage of the lower disposal charge, or if there is a significant reduction in the amount of hardfill coming into the landfill, there could be a reduction in revenue of up to \$100,000 per year (if no hardfill is brought into the landfill), although this is not considered likely. Financial results will be monitored during the trial period and if a deficit develops the trial may need to be modified or terminated.

It is proposed that Townshend Excavating Ltd would be awarded a contract for the crushing trial on a twelve month basis which would include the Waste Management Unit purchasing the crushed aggregate produced for use at the Burwood Landfill site.

3. **BENEFITS OF CRUSHING CONCRETE**

Benefits of crushing and recycling concrete at the Burwood Landfill could include:

1. Reduced disposal cost for the community for suitable material. This will become more significant as alternative cleanfill pits become full in the future and when the new regional landfill opens around 2002 with a significantly increased transport distance from Christchurch;
2. Expansion of differential charging for sorted waste materials. It is intended to further expand the range of charges for different types of waste in the future. (Note this is set out in the Draft Solid and Hazardous Waste Management Plan, see report RR 7147 elsewhere in this order paper. This concrete crushing trial will be useful to assess the practicality of differential pricing);
3. Saving in landfill "airspace". *Note this would be a significant advantage if the life of the Burwood Landfill was determined by available airspace rather than by a specific closure date, May 2002, stipulated in the resource consent.*

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- 4. Expansion of local employment opportunities by development of a recycling industry;
- 5. Production of a good quality aggregate on site, although this is a marginal benefit in Canterbury where aggregate is relatively plentiful.

4. SUMMARY AND CONCLUSIONS

Development of a concrete crushing facility at the Burwood Landfill could offer economic and social benefits immediately and these will become increasingly significant over the next four to five years as alternative disposal methods become more expensive.

It is proposed to conduct a concrete crushing (recycling) trial for a 12 month period, using reduced fees as an incentive to capture useable crushable material and as a disincentive for producing mixed or unusable material which needs to be treated as waste.

- Recommendation:**
- 1. That a new concrete crushing trial be conducted with Townshend Excavating Ltd as outlined above.
 - 2. That disposal charges for hardfill be revised to \$12/tonne and \$24.50/tonne (including GST) as outlined above from 1 July 1998.
 - 3. That the results of the above trial be reported to this Committee in approximately 12 months.

3. CHRISTCHURCH WASTEWATER TREATMENT PLANT UPGRADE
NEW CLARIFIERS AND AERATION UPGRADING

RR 7187

Officer responsible Mike Stockwell Manager	Author Mike Stockwell Mike Bourke
Corporate Plan Output: Liquid Waste Asset Improvements - Liquid Waste, Treatment Works, Page 9.2.75, 1997/98 Corporate Plan	

The purpose of this report is to gain approval for the engagement of a Consortium of City Design and Beca Steven to provide professional services for the construction of the new clarifiers and aeration equipment at the Christchurch Wastewater Treatment Plant. The consultant's report is tabled.

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1. BACKGROUND

Councillors are aware of the programme of upgrade work planned for the CWTP (the Plant) which has been the subject of various consultants presentations, seminars and reports to the Council over the past two years. This work is required to ensure that the Plant has sufficient treatment capacity to meet the needs of Christchurch City growth and satellite communities, (plus Belfast township and industries and Templeton) up until 2026.

The Council has budgeted the following capital sums for this programme (\$m).

96/97	97/98	98/99	99/00	00/01	2001/02	2002/03	2003/04	2004/05	2005/06	Total
0.4	3.2	3.9	7.5	3.9	3.6	2.7	2.0	1.4	1.4	30.0

Note this programme was 'smoothed' by the Council in late 1997 and it is **not** recommended that any element be delayed further.

2. PROPOSAL FOR PROJECT MANAGEMENT AND DESIGN ETC OF NEW CLARIFIERS AND AERATION UPGRADING

This report summarises a comprehensive report from the consortium of City Design and Beca Steven for the provision of professional services for the design, construction supervision and project management for the major interrelated elements of the next stage of the CWTP Upgrade. The major elements of this work are the building of new clarifiers and provision of aeration equipment and would be broken up into the following separate contracts:

	Timing of Work	Cost Estimate \$m
• Clarifiers 1 & 2 with associated channel/hydraulic works	98/99-99/00	6.22
• Secondary sludge thickening including mechanical and electrical	99/00	0.62
• Supply and installation of aeration and mechanical equipment	99/00	1.65
• Supply and installation of electrical services for aeration	99/00	0.30
• Clarifiers 3 & 4	01/02-02/03	4.10
• Pond inlet revisions and Bypass channel completion	01/02-02/03	2.28
• Total fees for above (8.5% of total cost)		1.43
	Total Construction Cost	15.17
	Total Fees	<u>1.43</u>
	Total Cost	<u>16.60 m</u>

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The consultants report states that their fee of 9.4% (of the construction cost) compares with a usual figure of 12% for similar work of this nature and complexity.

These works are required for increased plant capacity and are not part of the discharge consent considerations. These capacity enhancements will be required whatever the outcome of the discharge consent and they do not influence or affect other possible future treatment process additions.

The above works are closely interrelated and need to be designed together. Other aspects of the CWTP Upgrading (further odour control \$2.7m - 99/00 - 03/04, trickling filter flow capacity improvements \$2.8m - 04/06 and pond baffles/wetlands and shoreline diffuser \$2.9m - 99/01) are separate issues and will be dealt with in later reports.

It is important that detailed design of the interrelated major elements that are linked hydraulically or by process, is completed prior to tendering of any of the major elements for construction. This vastly reduces claims for extras associated with design changes when detailed design overlaps with the construction phase.

3. REASONS TO RUN WITH CITY DESIGN/BECA STEVEN CONSULTANTS

The reasons to run with the City Design/Beca Steven consortium can be summarised as follows:

- (a) Beca Steven have considerable in depth knowledge of the Christchurch Wastewater Treatment Plant and were the consultants who prepared the very well received 1996 Plant capacity report.
- (b) Beca Steven have a very good track record with previous work at the Christchurch Wastewater Treatment Plant.
- (c) Beca Steven have recent similar experience in sewer plant design (eg Tauranga, Wellington)
- (d) Beca Steven are very happy to work cooperatively with City Design who are experienced in tank (clarifier) design.
- (e) There will be advantages of synergy using the Council in house City Design Team in consortium with Beca Steven, such as established relationships and trust between City Design/Waste

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Management Unit and Beca Steven/Waste Management Unit
etc.

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- (f) The overall fee of 9.4% for professional services is considered very reasonable for work of this nature and complexity.

4. SUMMARY

Waste Management Unit has sought and received a report from a consortium of City Design/Beca Steven for the supply of professional services for the construction of new clarifiers and aeration equipment for the CWTP. The value of the work is around \$16.6m and the proposed professional fee is \$1.43m ie 9.4%. This fee is considered fair and reasonable for work of this nature and complexity and compares with a going rate of around 12%. The other benefits of employing this consortium are outlined above and provide a very convincing case for the acceptance of this proposal.

- Recommendation:**
1. That the proposal of the City Design/Beca Steven consortium for the provision of professional services for the design and construction of clarifiers and aeration equipment at the CWTP be accepted.
 2. That it be noted that the Committee has not sought tenders for this work for reasons (a) to (f) outlined in the report.

4. DRAFT SOLID AND HAZARDOUS WASTE MANAGEMENT PLAN - 1998

RR 7147

Officer responsible Waste Manager	Author Zefanja Potgieter
Corporate Plan Output: Solid Waste Management Plan	

The purpose of this report is obtain approval from the Council to publicly notify a draft waste management plan for solid and hazardous waste for the city. This report has been referred to the Environmental Committee also.

BACKGROUND

The current *Solid and Hazardous Waste Strategy - Summary Update August 1996* (the 1996 Strategy) is in need of a review due to the nature of the legal requirements for the city to adopt a Waste Management Plan. These legal requirements are contained in Local Government Amendment Act No.4 which was promulgated in August 1996.

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Whilst the 1996 Strategy does contain the substance required for a waste management plan, it did not follow a process of public notification, written submissions, hearings and final adoption by the City Council now required in terms of Section 539 (3)(b) of the Local Government Amendment Act No.4 (similar to the current City Plan process). The initial idea amongst Solid Waste Section staff was to utilise the 1996 Strategy with minor amendments and use it as the document to be notified. During staff workshops on the new waste management plan new ideas were continually being raised and it became clear that a new plan was in fact evolving.

PREPARATION OF THE DRAFT WASTE MANAGEMENT PLAN FOR SOLID AND HAZARDOUS WASTE.

In order to benefit from the different perspectives and insight offered by the community, the Solid Waste Advisory Group which had contributed to the 1996 Strategy, was reconvened. Many of the members of the 1994 advisory group met regularly over a period of time, resulting in recommendations to staff for inclusion in the plan. At a subsequent Seminar for Councillors from the City Services and Environmental committees held on 20 October 1997 staff presented the outline and key points of the new plan, followed by comments from representatives of the Advisory Group. The outcome of the Seminar was agreement on the key points of a new waste management plan.

The draft plan was made available to the members of the Advisory Group and discussed in detail at a meeting of the Group on 20 February 1998.

THE PLAN

The approach followed with the plan is to avoid lengthy paragraphs in the main part of the Plan. The idea is to clearly and briefly state the contents, thereby not losing the attention of the reader. The format is thus to the point and in easily manageable sections. It is followed by 10 appendices which sets out in detail a range of relevant information for those interested.

The format is thus as follows: After a short Introduction, the plan goes on to the overall *Vision, Goal, and Key Principles and Strategies*, before dealing with

- **Reduce**
- **Reuse**
- **Recycle**
- **Recover**
- **Residue disposal**
- *Hazardous and Special wastes* (as a distinct part of the waste stream).
- The Appendices.

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The Draft Plan to be considered for notification has been circulated to Councillors and is tabled at the Council meeting. Note that the layout/design will be changed before publication. Tony Gimson a print consultant who has assisted the Waste Management Unit with a number of other publications has been engaged for this purpose.

THE WAY FORWARD

After approval of this draft plan for notification the timetable is as follows:

- Preparation for notification, including layout/printing -five weeks.
- Notification date: 30 April 1998.
- Submissions period: 1 May till 28 May 1998 - four weeks.
- Analysis of submissions and notification of hearing dates, up to first week in July 1998 - five weeks (with a possibility of four).
- Hearings during mid-July.
- Preparation of final report, including amendments resulting from the hearings process - three weeks.
- September committee meetings and City Council meeting of 23 September 1998 for final adoption of the plan.

The timetable is tight and it is hoped to present the final plan to the City Council meeting before the October elections. If presentation to the City Council meeting of 23 September is not possible, the final report would need to be re-submitted to the City Services and Environmental Committees at the first cycle of Committee and City Council meetings of the new Council, probably December 1998.

The Committee discussed the draft reported and amendments adopted have been included in the Draft Plan submitted to the Council. The Draft Plan was received by the Environmental Committee also and has recommended that Councillors Evans and Dodge be members of the panel to hear submissions on the Plan.

- Recommendation:**
1. That the Christchurch City Council adopt the Draft Waste Management Plan for Solid and Hazardous Waste for public notification to the timetable outlined in this report.
 2. That the City Services Committee consider submissions received on the Draft Plan.
 3. That the Solid Waste Advisory Group be thanked for their contribution to the Draft Plan.

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**5. COST SHARING OF NEW WATER SUPPLY INFRASTRUCTURE -
MONCK'S SPUR AND UPPER MOUNT PLEASANT**

RR 7206

Officer responsible Water Services Manager	Author Eric van Toor
Corporate Plan Output: New Assets, Water Supply	

The purpose of this report is to describe the water supply infrastructure required to meet anticipated development at the upper parts of Balmoral Hill, Moncks Spur and Mt Pleasant, and to recommend a method whereby infrastructural costs can be recovered from the developers who directly benefit.

INTRODUCTION

An objective of the Water Services Unit is to facilitate the expansion of the water supply network to new areas zoned "Living" in the proposed City Plan. While it is intended that growth be funded by the developers, Council involvement is sometimes necessary to enable the cost-effective and timely development of a new area.

With extensive hill developments it is necessary to supply water through a series of reservoirs and pump stations. The preferred lift by each pump station is in the order of 70 metres to provide an economical system while ensuring the pressure range to consumers is between 25 to 100 metres. The Living Zones at Mt Pleasant extend to 320 metres above sea level and to reach the top of the development water passes through five reservoirs and pump stations.

With over fifty subdividable lots in the area ranging in size from 0.2 ha to approximately 10 ha, the efficient extension of services can only realistically occur with Council involvement in initial funding (but with a mechanism for later cost recovery). The purpose of this report is to advise costs associated with the scheme and recommend how the new infrastructure can be funded.

EXISTING SITUATION

A map showing existing reservoirs (indicated by solid triangles) is attached. At present the main route for pumping water to the area is through four pump stations and reservoirs along Mt Pleasant and Major Hornbrook Roads. An alternate pumping route is via a single reservoir on Moncks Spur Road (Moncks Spur 2), which has pumping facilities directly to Mt Pleasant 4 reservoir, near the intersection of Moncks Spur and Mt Pleasant Road. The McCormacks Bay reservoir which is the main storage to the area east of the Ferrymead Bridge, is located between these two routes. Water is

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pumped from McCormacks Bay to the Upper Balmoral reservoir, located at the same level as Moncks Spur 2.

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The existing main pumping route along Mt Pleasant and Major Hornbrook Road is virtually at capacity. The route up Moncks spur also has little available capacity. The line from McCormacks Bay Reservoir to Balmoral Reservoir has capacity essentially just for the area between these two reservoirs with little to spare for future on-pumping.

There are in excess of 100 ha above the existing Balmoral and Moncks Spur 2 reservoirs zoned Living H or Living HA in the proposed City Plan, with sufficient land for up to 800 new lots.

REQUIRED INFRASTRUCTURE

In all, infrastructure worth approximately \$1.5M will be required over a ten year period.

The route from McCormacks Bay Reservoir to Upper Balmoral Reservoir and then up Moncks Spur to Mt Pleasant 4 Reservoir is the logical route to convey the increased demand to the area. This is because of the large available storage at McCormacks Bay and because much of the pipework can be done in conjunction with roading that is still to be constructed.

A new reservoir and pumping station is required between the existing reservoirs at Upper Balmoral and Mt Pleasant 4. A new pumping station and permanent reservoir will also be required to serve the highest part of the zone, above the intersection of Mt Pleasant and Major Hornbrook Roads.

FUNDING ISSUES

It is the Council's policy that developers provide the infrastructure required to serve their proposed subdivision as a condition of subdivision consent. In the case of water supply infrastructure this can be accomplished by a combination of:

- (a) A headworks upgrading contribution to recover the costs of new wells and primary pumping stations to get the water out of the aquifers and into the reticulation system.
- (b) A requirement for developers to provide new infrastructure that is necessary to serve their subdivision specifically.
- (c) Charges imposed at the time of subdivision by means of a Cost Sharing Scheme.

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The headworks contribution (currently \$489 per lot plus GST) which is specifically for upgrading primary pumping stations (in this case in the Linwood area) applies in addition to any other charges that relate specifically to upgrading in the immediate area.

In this case the cost of extension is beyond the realistic ability of any single developer. A fair apportionment of cost among developers who will benefit from the infrastructure can only be achieved by the Council facilitating the establishment of a Cost Sharing Scheme.

A Cost Sharing Scheme at Mount Pleasant would be one of two being planned by the Water Services Unit. The establishment of a Cost Share Area on Huntsbury Hill was approved in principle by the Council in August 1996. It is expected that if the establishment of the Mt Pleasant Cost Sharing Area is approved by the Council, formal establishment of the two schemes would proceed in parallel over the next few months. These would be the first Cost Sharing Schemes established consistent with the City Plan provisions and the first for the Council apart from those established by the former Christchurch Drainage Board.

PRINCIPLES FOR SETTING UP A COUNCIL COST SHARING AREA

Contributions towards the cost of infrastructure are provided for in the City Plan. The basic structure of a Cost Sharing Scheme for water supply is outlined in chapter 14, section 8.3 of the City Plan rules, which states:

All land owners included in a cost sharing scheme will be notified at the time the scheme is initially set up, together with the estimated shares of their cost of the system.

Costs will, initially, be based on the Council's estimates, until installation takes place and thereafter shares shall be based on actual costs. Estimates will be adjusted in accordance with the construction cost index, but actual costs will be based on the Consumer Price Index, adjusted annually on 30 June each financial year, beginning on 30 June 1996.

Contributions cannot be taken under the provisions of the Plan until it becomes operative. In the meantime the Transitional Provisions of the Resource Management Act provide that contributions to new infrastructure can still be levied in accordance with the repealed s.283 of the Local Government Act.

There is some urgency to establish a Mt Pleasant Cost Share Area because development is already proceeding, for example on Glenstrae Road in the vicinity of the Balmoral Reservoir. The absence of a Cost Share Area does not mean contributions cannot be required as a condition of subdivision, but its formal establishment will:

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- (a) Allow the Council to recover contributions made in the early stages of the scheme.
- (b) Result in an equitable apportionment of costs between developers who benefit.
- (c) Give developers a degree of certainty as to the size of contributions they will be required to make.
- (d) Allow some flexibility to vary the construction rate in relation to the rate of development (because increased development will result in increased contributions to fund construction work).

THE MOUNT PLEASANT COST SHARING SCHEME

The proposed area for the scheme is shown on the attached plan. It includes all the Living Zones above the existing Mount Pleasant 3, Upper Balmoral and Moncks Spur 2 reservoirs (plus land near these reservoirs that must be served from higher zones). The area will be varied in future as necessary to reflect the results of the City Plan hearing process and any future zone changes. Because of geographical constraints, the boundaries are not expected to change to an extent where there would be a large difference in infrastructure or contributions required.

A budget showing the expected works required to complete the construction in ten years is attached. In order to achieve the programme as shown, the Council would be contributing \$826,000 over eight years and with a steady income from contributions would expect to recover most if not all of the cost over a 20 year period. The scheme would be closed off when the expected number of new allotments is reached, or possibly before then if little further development was expected.

The rate of subdivision can only be guesstimated at this stage. However it is expected that the Council's financial input would not change much from the programme, but the rate of construction may have to be accelerated if the rate of subdivision is greater than expected. This means that some capital expenditure would have to be brought forward, but would be compensated for by the increased number of contributions, which would show as income into the operating account.

The scheme must be separately accountable. New revenue and expenditure codes would be established for the scheme. This will allow the overall scheme income and expenditure since establishment to be calculated at any time.

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The required contributions for each new allotment based on Proposed Plan zone boundaries are shown below.

Zone		Expected No. Allotments	Total Cost	Cost per new allotment
1	Served from Mt Pleasant 4	520	\$931,300	\$1,791
2	Served from Proposed Mt Pleasant 5	180	\$553,300	\$3,074
	Total	700	\$1,484,600	

The zones are likely to change however, as a result of submissions to the Proposed Plan. Lower density development to higher parts of Mt Pleasant, will result in higher contributions per property, which could be up to \$2,000 for those served by Mt Pleasant 4 and \$3,800 for those served from Mt Pleasant 5. It is expected that the outcome of the submissions will be available in August 1998 and the contributions adjusted at that stage.

Cost will be updated in accordance with the clause in the City Plan quoted above. Work already carried out will be updated in accordance with the Consumer Price Index. While this is less than current interest rates and there will consequently be a net cost to the Council in administering the scheme, there will at least be protection against inflation of the money "loaned" the scheme by the Council.

The Council's contributions to the scheme are covered by the existing 10 year capital works budget, except for the cost of the proposed Moncks Spur 3 reservoir site (expected to be in the order of \$120,000) which is being requested as an additional item in the 1998/1999 budget.

Should the establishment of this Cost Sharing Scheme be approved, details of the proposed scheme will be circulated to all those within the scheme boundary inviting comment. The comments will be collated and a further report presented to Council for final approval. The requirement for contributions will be attached to LIMs and PIMs so that intending and future property owners are aware of the scheme.

- Recommendation:**
1. That a Mount Pleasant Cost Sharing Scheme be established to recover the cost of water supply infrastructure required to supply the Living Zone above the Mt Pleasant 3, Upper Balmoral and Moncks Spur 2 Reservoirs.
 2. That affected property owners be advised of details for the scheme inviting comment, with a further report to the City Services Committee for final approval.

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**6. PARKING RESTRICTIONS - STATE HIGHWAY 1, 73 AND 74
MAIN SOUTH ROAD AND BROUGHAM STREET**

RR 7193

Officer responsible City Streets Manager	Author Michael Thomson, Traffic Engineer
Corporate Plan Output: Street Markings and Signs 9.6.0	

The purpose of this report is to gain Council approval for parking restrictions on Main South Road and Brougham Street.

Transit New Zealand, via its consultants, have requested that the Council resolve to restrict kerbside parking at three locations on State Highway Nos 1, 73 and 74 to ease traffic congestion entering or exiting intersections. The affected intersections are Main South/Parker/Seymour (Hornby), Main South/Carmen/Shands (Hornby) and Brougham/Opawa (Opawa). At the two Hornby locations, all properties affected have access and parking from alternative streets. At Brougham Street, the only property affected is a service station nearby, which has ample on site parking. The proprietors have been consulted.

Recommendation: That the parking of vehicles be restricted at all times at the following locations:

1. on the southern kerbside of State Highway No 1 (Main South Road), commencing at the intersection of Seymour Street, extending in a westerly direction for a distance of 61 metres;
2. on the northern kerbside of State Highway No 1 (Main South Road), commencing at the intersection of Parker Street, extending in a westerly direction for a distance of 84 metres;
3. on the northern kerbside of State Highway 74 (Brougham Street), commencing at the intersection of Opawa Road, extending in an easterly direction for a distance of 130 metres;
4. on the northern kerbside of State Highway No 73 (Main South Road), commencing at the intersection of Carmen Road and Shands Road, extending in an easterly direction for a distance of 105 metres.

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7. BUCHANANS ROAD/RACECOURSE ROAD INTERSECTION RR 7201

Officer responsible City Streets Manager	Author Brian Neill, Traffic Engineer
Corporate Plan Output: Capital Works Programme 1997/98	

The purpose of this report is to update the Council on proposals to reconstruct the intersection of Buchanans Road and Racecourse Road with a view to improving intersection safety and strengthening the road hierarchy in this part of the city.

BACKGROUND

Councillors will recall considering reports at the 2 May and 30 May 1997 meetings of the Committee which described a proposal to realign the intersection which would strengthen the Buchanans Road/Racecourse Road South minor arterial route. This proposal was opposed by residents of Buchanans Road who were concerned about the possible increase in the speed and volume of traffic using Buchanans Road. The residents proposed an alternative “solution” which involved the construction of a traffic island at the intersection to slow traffic turning from Racecourse Road left into Buchanans Road.

The Committee recommended to the Council that “*the residents option be trialed over a three month period to assess the benefits of that particular technique*”. At the Council meeting held on 25 June 1997 this recommendation was endorsed with a further amendment “*that the assessment also include a safety audit*”.

SAFETY AUDIT

The traffic island suggested by the residents was subsequently constructed and Mike Gadd and Associates commissioned to carry out a post construction safety audit and intersection layout review. This audit was completed in November 1997 and has been reviewed by the City Streets Unit.

The audit identified problems with the existing intersection layout (plan attached to this report) as:

- The relatively open and poorly designed nature of the intersection layout.
- The siting and poor condition of the island and signs on the Buchanans Road approach to the intersection.
- The new island does not cater for cyclists and differs markedly from the original recommended layout.

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- The new island does not appear to address safety issues indicated in the crash record for this junction.
- The layout does not cater for the traffic flows (including turning movements) and does not support the network classification and functions of the roads.
- The layout does not cater well for pedestrian cross movements.

Due to the history of the intersection, its crash record and concerns of residents the report considered four alternative options for controlling traffic at this junction:

1. **Status Quo**

If the intersection were to remain in its present form existing safety problems are likely to worsen over time as traffic increases.

2. **Change to Support Road Network and Traffic Flows** (plan attached to this report)

The original scheme. This would reduce some traffic conflicts but would not address the residents' concerns for the speed of traffic entering Buchanans Road from Racecourse Road or the difficulty of vehicle access to properties on the southern corner of the intersection.

3. **The Construction of New Traffic Islands**

This would not effectively address existing safety concerns and was not recommended.

4. **A Roundabout** (plan attached to this report)

The installation of a roundabout was favoured with a recommendation that this option be further investigated. A roundabout would provide better definition for motorists as to who gives way at the intersection. It would reduce speeds through the intersection, support the network and would lead to a reduction in the number of crashes that have been occurring. Splitter islands on the roundabout approaches would cater for pedestrians who could seek refuge in the middle of the road when crossing from one side to the other.

The report noted however that the high cost of this option would mean that the benefit to cost ratio parameters for securing Transfund subsidy could not be met.

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PROJECT STATUS

Original budgeting for this project was made on the basis of a benefit/cost ratio of 4.9 not including savings in vehicle operating costs. The original cost of construction was placed at \$77,000. There is a proposal to carry forward finance and allow for the project to proceed during the 1998/99 financial year. The revised cost estimate for this work (including design and supervision fees/work done to date) is \$95,000.

The cost of installing a roundabout which would satisfy all safety and traffic movement criteria would be in the order of \$300,000.

The City Streets Unit's view is that, although the original proposal would achieve the original objective of reducing crashes and enhancing the road hierarchy acknowledgment has been given to the concerns of residents living in the immediate vicinity of the intersection and for the safety of pedestrians crossing the roadway in this area. The Unit remains opposed to any reduction in the level of service along the Buchanans Road/Racecourse Road minor arterial link. This link should be strengthened not downgraded as suggested by residents. The new roundabout at the Buchanans Road/Pound Road intersection and proposals for upgrading the similar facility at Carmen Road (SH 1) reinforces the need to provide good access and high quality traffic management in this area.

Support is therefore given to the proposal to construct a roundabout at the intersection of Buchanans Road and Racecourse Road. However, as a \$300,000 roundabout proposal is only likely to have a B/C of about 1, it is unlikely to gain Transfund support for 5 to 10 years. The Council would need to fund the work if the project is to proceed within a shorter time frame.

MONITORING

The Land Transport Safety Authority has indicated that they have not received any reports on accidents (from the Police) during the period August 1997 to the end of January 1998. It is understood that residents living in the vicinity of the intersection are pleased with the existing layout as it protects turning movements in and out of driveways to properties fronting onto the southern corner of the intersection. There are, however, unsubstantiated reports of minor collisions with the traffic islands involving both car and truck movements through the intersection.

Clearly there is a responsibility for the Council to continue to monitor traffic flows and collisions at the junction in order to support a case to construct a roundabout.

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Minor improvements can be made at the intersection to provide better definition for vehicles turning (traffic signs and markings), to minimise conflicts and ensure that clear right of way is given to drivers entering the intersection. These improvements would be modelled on the existing layout of the adjacent intersection of Racecourse Road and Waterloo Road.

CONCLUSION

Although the original proposal to realign the intersecting roads at this junction was based on sound criteria aimed at crash reduction and strengthening of the road hierarchy, an independent safety audit and intersection layout review suggests that a large roundabout is the preferred option for controlling traffic at the intersection of Buchanans and Racecourse Roads. However, it is unlikely to meet Transfund's B/C criteria.

The City Streets Manager advised that if the Council wishes to proceed with the work (unsubsidised) funding of \$205,000 would need to be voted for the 1999/2000 financial year. As the project does not rank alongside other similar safety works there is no room to effect a substitution in the current 5 year capital works programme. The Committee's recommendation below was considered by the Annual Plan Working Party at its meeting on 18 March.

- Recommendation:**
1. That a roundabout be signalled as the preferred method of controlling traffic at the Buchanans Road/Racecourse Road intersection.
 2. That the Council provide an (unsubsidised) sum of \$205,000 in 1999/2000 in the 5 year capital works programme to enable the roundabout proposal to proceed during the 1999/2000 financial year. This funding is additional to funding for work currently programmed in 1998/99.
 3. That the Riccarton/Wigram Community Board be informed of the decision.
 4. That access to adjacent properties be discussed with residents as part of the design process.

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8. LINCOLN ROAD WIDENING TO FOUR LANES FROM BARRINGTON STREET TO TORRENS ROAD

RR 7196

Officer responsible City Streets Manager	Author Michael Thomson, Traffic Engineer
Corporate Plan Output: Capital Works Programme	

The purpose of this report is to advise the Council on a plan to improve traffic management along Lincoln Road, provide increased safety for motorists, cyclists and pedestrians and improve the streetscape.

PLANS

The plans attached to this report will be circulated to businesses and residents in March or April, with a view to receiving information which could lead to any improvements in the proposal. All immediately affected adjoining owners have been previously contacted by Property Unit staff inviting them to enter negotiation on purchase of designated land required for road widening. Our intention is to be in a position to receive tenders for the work in November 1998.

SCOPE OF PROJECT

Construction will be undertaken in two stages over three financial years affecting that section of Lincoln Road between Barrington Street and Sylvan Street. The work involves widening to accommodate four traffic lanes, cycle lanes and parking lanes. The road will be median divided with additional turning lanes at the traffic signals.

PROJECT FEASIBILITY

The project achieves a benefit cost ratio of 4.1, attracting a Transfund subsidy, based on costs of \$3.36 m. Benefits are achieved through travel time and vehicle operating cost savings of \$11 million. Accident savings of \$0.5 million are achieved.

TRAFFIC CAPACITY

Traffic volumes on Lincoln Road have been growing at the rate of 3.5% per annum. Flows vary along the entire length of Lincoln Road, being in the range of 22,000 to 25,000 vehicles per day. Continued growth of the Halswell/Westlake area, development of the new A&P Showgrounds/sales yards, and completion of the new Entertainment Centre are expected to place heavy demands on Lincoln Road. There are currently capacity problems with long queue lengths forming in peak hours at the Lincoln/Lyttelton/Wrights and Lincoln/Barrington/Whiteleigh intersections.

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CYCLE AND PEDESTRIAN SAFETY

Cycle lanes will be installed in both directions with dedicated lanes at each signalised intersection. Pedestrians will benefit from the introduction of a central median being provided with dedicated crossing points within the median. Cyclists crossing Lincoln Road will also be able to use the median facilities. A new refuge island is proposed west of the Torrens Road intersection, being located at the limit of the contract.

TRAFFIC SAFETY

The median will continue through the intersections of Torrens, Lindores, Nairn and Taramea, to avoid the incidence of right turning collisions. Alternative protected right turn and U turn slots will be provided to accommodate residential access to these streets.

STREETSCAPE

The new traffic median will be of sufficient width to accommodate street trees, grassed areas and groundcover planting. This additional landscaping will complement existing tree planting along the road reserve. Overhead power and telecom services have been undergrounded.

CONCLUSION

The widening of Lincoln Road to a four lane, median divided road, incorporating cycle and parking lanes, with additional capacity at the signalised intersections, will improve safety and convenience for all road users on Lincoln Road.

The Committee requested that officers report on a proposal that dual laning of Lincoln Road be extended from Torrens Road to Annex Road. Officers will also report on a request to include more trees in the landscaping of the street.

- Recommendation:**
1. That the scheme as outlined in the report be approved.
 2. That the Spreydon/Heathcote Community Board be informed of the scheme.

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9. COLOMBO STREET TRAFFIC MANAGEMENT

RR 7200

Officer responsible City Streets Manager	Author Brian Neill, Traffic Engineer
Corporate Plan Output: Capital Works Programme 1998/99	

The purpose of this report is to advise the Council of a plan to improve traffic management along Colombo Street between Brougham Street and Milton Street.

BACKGROUND

The Council has progressively been renewing the kerbs, channels and footpaths along Colombo Street. More recently work has been completed through Sydenham and along Colombo Street to Ashgrove Terrace. The last section of work to be undertaken will be between Brougham Street and Milton Street.

The current project involves the reconstruction of the kerbs, channels and footpath along the west side of Colombo Street between the Brougham Street and Milton Street/Huxley Street intersections and includes some realignment of the kerbs and channels on the Milton Street and Huxley Street approaches to the intersection.

TRAFFIC MANAGEMENT

Whenever works of this nature are carried out on an arterial road the plans are examined for possible traffic management improvements including provisions for cyclists, increased capacity at intersections and road safety generally. Traffic features of this particular project include the realignment of kerbs and channels at the intersection of Colombo Street, Milton Street and Huxley Street to ease traffic congestion along Colombo Street and provide for cycle movements through this busy junction of two minor arterial roads.

A cobblestone threshold is proposed at the entrance to Faraday Street with proposals to control the Hutchinson Street, Hastings Street and Walton Street intersections with "Give Way" signs. A new right turn signal will be introduced at the Milton Street/Huxley Street intersection to cater for the increasing amount of traffic that is turning right out of Colombo Street into Huxley Street. The proposal also includes a ban on right turns from Huxley Street into Colombo Street north (except for buses) to cater for the increasing amount of traffic that is using the Gasson/Burlington/Huxley/Milton Street arterial link across this part of the city.

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Cycle lanes are to be introduced along Milton Street as part of a plan to extend the on street cycle link to Barrington Street and the Somerfield/Spreydon residential areas. Cycle lanes are to be introduced along Colombo Street between Milton Street and Brougham Street as this section of roadway provides a strong cycle link between two arterial roads and the Sydenham commercial area.

A flush (painted) median is to be introduced along this section of roadway to match similar facilities along other sections of Colombo Street north and south of this area. To accommodate the proposed cycle facilities and provision of a flush median, a ban on parking is proposed along the east side of Colombo Street between Brougham Street and Huxley Street. Already in this area and along the west side extensive lengths of "no stopping" restrictions are in place. Provision will be made for kerbside parking along the frontage to Sydenham Park and the Sydenham Rugby Football Club rooms by, where practicable, widening the roadway and narrowing the footpath.

The traffic management proposals and extent of the kerb and channel works are illustrated on the plan attached to this report.

PROCESS

A publicity leaflet describing this project is being distributed to residents and businesses in the area with a view to receiving comments by the end of March. Construction is programmed for September or October 1998 and will include traffic signal phasing changes at the intersection of Colombo Street/Milton Street and Huxley Street. Following public consultation, the Committee will be asked to recommend to the Council changes to kerbside parking restrictions in the area and the installation of "Give Way" signs at the Hutchinson Street, Hastings Street and Walton Street intersections.

CONCLUSION

The proposed works will improve traffic management along this section of Colombo Street and on the minor arterial route along Milton and Huxley Streets. Improvements will be made to road safety through protected right turn facilities for traffic turning off Colombo Street. Cycle facilities will be provided at the signal controlled intersections and cycle lanes will be painted along Milton Street, part of Huxley Street and in Colombo Street between Brougham Street and Milton Street. The work is to be completed in the 1998/99 financial year at an estimated cost of \$180,000.

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- Recommendation:**
1. That the information be received and the scheme be approved subject to the provision of a pedestrian refuge in the median between Hutchinson Street and Hastings Street.
 2. That the Spreydon/Heathcote Community Board be informed of the proposals.

10. STRUCTURES ON STREET PROCESS

RR 7199

<p>Officer responsible City Streets Manager</p>	<p>Author Weng-Kei Chen, Asset Policy Engineer</p>
<p>Corporate Plan Output: Roothing Land 9.5 text 14</p>	

The purpose of this report is to request the Council to formalise past practices for the structures on street process as Council policy and to seek delegated power for the City Streets Manager to terminate a licence to occupy legal road when the intent of the policy and/or conditions of the licence have been breached.

BACKGROUND

The Council at its October 1996 meeting resolved to adopt the recommendation of the Hagley/Ferrymead Community Board that pursuant to Clause 1 of the Deed of Licence dated 1 August 1994 the Council revoke that licence which permits Mr L J Bathurst to occupy a motor garage encroaching upon Main Road, Moncks Bay (known as garage 42) by giving Mr Bathurst six calendar months notice in writing. The Termination Notice was formally issued on 13 November 1996. On 26 February 1997 the Office of the Ombudsman advised that a complaint has been lodged by Mr Bathurst against the Council's decision to revoke his licence, and seeking relevant papers to enable the office to conduct its own investigation. On 28 July 1997 the Ombudsman advised the Council that there were insufficient grounds to sustain the complaint. However he did comment that "Council may need to consider formalising its policy and advising licensees of the policy in order that the terms are understood by intending purchasers fully".

The Council has a long history of permitting garages on legal road. The granting of garage sites has significant advantages to occupiers and at the same time helps to ease on street parking pressure on some hill roadways. The garage sites have also been used as one of the tools to enable residential developments in difficult terrain. In recent times some of these garages have been replaced by drive on accesses with garages being rebuilt closer to

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the dwellings. However, there are still substantial numbers of garages wholly on legal roads, eg Main Road (Moncks Bay), Scarborough Road, Heberden Ave, Nayland Street etc. Over the years, some of these occupiers have constructed alternative garaging facilities on their own properties and their needs for a garage site outside other property frontages is questionable. There are garages being used for general storage and this breaches the condition of the licence. It is our intention to notify the occupiers of the Council's policy for structures on street and take appropriate action for those breaching the intent of the policy and conditions of the licence. This is regarded as an operational function. At the moment termination of licence is carried out by Council decision and it is recommended that this function be delegated to the City Streets Unit Manager.

CURRENT PROCESS

The procedure for structures on street applications is documented in the City Streets Unit Service Delivery Procedures dated May 1996. A review to the document was carried out following the Ombudsman's comment. An amended copy of the document including a standard Deed of Licence to occupy legal road Appendix A is attached. The document outlines the policy and the approval process.

- Recommendation:**
1. That the document as shown in Appendix A forms the Council's policy for the structures on street process.
 2. That the City Streets Unit Manager be given the delegated power to terminate the licence to occupy legal street when Council policy and/or conditions of the licence have been breached.

PART B - REPORTS FOR INFORMATION

11. DEPUTATIONS BY APPOINTMENT

Mr Kevin Moreton (Economy Tyres Limited) and Debra Milne (Budget Tyres Limited) were in attendance at the meeting. The Committee agreed to hear their submissions on the disposal cost of tyres. (Clause 1 of the Committee report.)

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12. CO-ORDINATING COMMITTEE FOR TRAFFIC SAFETY RR 7202

The Committee received a report from the Traffic Safety Co-ordinator on education and traffic safety awareness campaigns.

The City Streets Manager has undertaken to prepare a map showing places in Christchurch with high incidences of traffic accidents.

13. COMBINED TNZ/CCC/CIAL TRANSPORT STUDY OF SH 1 - RUSSELLY ROAD AND THE AIRPORT ENVIRONS RR 7245

The Committee received a preliminary report of a study proposed. A more comprehensive report will be presented to the Committee in April.

14. WATER RESTRICTIONS

The Water Services Manager reported on the recent effects of the water restrictions. It was noted that water usage had reduced and was trending in the right direction. It was agreed that the Water Services Manager be authorised to lift the restrictions on the irrigation of gardens in the evening and that a restriction be imposed between 9.00 am and 6.00 pm.

**PART C - REPORT ON DELEGATED DECISIONS
TAKEN BY THE COMMITTEE**

15. ESSENTIAL SERVICES RR 7269

The Committee was advised of the resolution of the Community Services Committee to hold a joint seminar of the Community Services and City Services Committees to allow managers of essential services to speak on the security and reliability of Christchurch's essential services. Councillors, Community Board members and key representatives of the business community, community organisations and Civil Defence were to be invited. The City Services Committee concurred with the Community Services Committee's recommendation and resolved further that a pamphlet outlining the state of the infrastructure in Christchurch be prepared for distribution on request.

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**16. RICHMOND HILL ROAD
STREET TREE MAINTENANCE AND FELLING**

RR 6932

A report to the February meeting of the Committee sought approval for the removal and replacement of plane street trees in Richmond Hill Road. At that meeting the City Streets Manager advised that kerbs and channels in the street were to be renewed and noted that should the proposed trees be removed kerb, channel and footpath damage would be caused requiring immediate attention. The Committee appointed a sub-committee of the Chairman and Councillor Ron Wright to meet on site and report back to this meeting of the Committee. The on site meeting of the sub-committee noted that the trees are in good condition. If they are removed the kerbs and channels and footpath would be damaged and the work scheduled for 2007/08 would have to be brought forward. Sub-committee members considered that when the kerb and channel work is undertaken that the street could be narrowed.

The Committee **resolved**:

1. That the existing plane trees (11) in Richmond Hill Road remain and that the issue be reconsidered with the replacement of kerbs and channels and footpath maintenance.
2. That this work be rescheduled from 2007/08 to 2000/01.

**17. PROPOSED NATIONAL CONFERENCE
ON PACKAGING AND RECYCLING**

RR 7155

The Committee was advised of progress on a request from the Committee that the Council investigate the holding of a national conference on packaging and recycling. The City Services Committee after further discussion on the proposal has **resolved** that the Recovered Materials Foundation be requested to investigate the feasibility of holding a conference in Christchurch on the packaging and recycling topics.

**18. SUPPLEMENTARY ITEM
ESSENTIAL SERVICES**

The Committee **resolved** to consider the supplementary report clause 19. The Chairman outlined the reasons why the item was not on the agenda and why the matter could not wait for the next meeting.

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19. RESOLUTION TO EXCLUDE THE PUBLIC

The Committee **resolved** that the draft resolution to exclude the public set out on page 33 of the agenda be adopted.

CONSIDERED THIS 25TH DAY OF MARCH 1998

MAYOR