# REPORT OF THE

# COMMITTEE ON WORKS AND OPERATIONS

# DATED JUNE 4, 1996

On motion of Councillor Clement, the Report of the Committee on Works and Operations, dated June 4, 1996, was considered clause by clause.

Moved by Councillor Clement,
That the Consent Agenda, Clauses 1,2,3,4,5,6,7,8,9,10 and 11 be adopted.

Councillor Golden requested that Clause 7 be pulled from the Consent Agenda.

Councillor Prystanski requested that Clause 8 be pulled from the Consent Agenda.

The motion to adopt the Consent Agenda, Clauses 1,2,3,4,5,6,9,10 and 11 was put and declared carried.

Her Worship the Mayor and Councillors:

**South Transcona Land Drainage - Financing Options File PD (Vol. 11)**

**794 -** 1. The Committee on Works and Operations has been advised that spring runoff events caused flooding in South Transcona in 1974, 1979, 1983 and 1989.

In May 1989, M.M. Dillon Limited Consulting Engineers completed the report South Transcona Land Drainage Study, which was originally requested by the East Kildonan-Transcona Community Committee in response to frequent flooding of the area during Spring runoff events. The report included drainage proposals for three specific development alternatives, due to a petition to amend the Urban Limit Line in South Transcona.

On September 15, 1989, the Province rejected the proposal to amend Plan Winnipeg to redesignate rural lands in South Transcona. As a result, no further consideration was given to financing and constructing the proposed drainage solutions.

Following the flooding in South Transcona from severe rainstorms in July and August 1993, the Executive Policy Committee requested an updated report on the drainage alternatives and associated costs contained in the Dillon Report.

On October 20, 1993, Council adopted the Executive Policy Committee recommendation that $1.5 million be placed in the 1994 Capital Budget to proceed with Alternative A of the Dillon Report, and that the matter be referred to the Capital Budget process for debate. Alternative A included a perimeter ditched dyke around the Hamlet to protect it from overland flooding and Dugald Ditch high water levels, a stormwater retention basin to take runoff within the dyke area, a pumping station to pump retained water into the Dugald Ditch once flows within it have receded, and regrading of existing internal ditches to route runoff to the retention basin.

On January 26, 1994, Council adopted the 1994 Capital Estimates including $1.5 million for engineering and construction for the South Transcona Land Drainage Project (Alternative A). Council approved funding of an undefined portion of this project as a Local Improvement.

On July 20, 1994, Council adopted the Report of the Committee on Works and Operations titled South Transcona Land Drainage Project Local Improvement recommending that the local improvement advertisement to levy a special assessment for a trunk stormwater drainage system be based on a uniform rate based on area of land benefitted, to recover the total cost of the regional drainage works associated with the project. The dyking portion of the project was to be funded by the City-at-large.

**Report of the Committee on Works and Operations dated June 4, 1996**

On September 23, 1994, the Tax Branch of the Finance Department advised that the petitions against the local improvement advertisement had been signed by benefitting property owners representing 69.84% of the total assessable. This was therefore sufficient to defeat the project and have the funds for the improvement deleted from the Capital Program.

Each time South Transcona experiences flooding, the City has assisted residents by providing a stockpile of sandbags at a central location. Also, in preparation for the spring thaw, the City has removed snow and debris from the Dugald Ditch and Plessis Road ditch. As the weather warms up, steaming equipment has been used to thaw frozen culverts.

During the more recent flooding events, starting with the rainstorms in 1993, the City has set up a portable pump to transfer water from the Dugald Ditch to the wastewater interceptor sewer. As well, a temporary interconnection was installed in late 1993 between the Dugald Ditch and the land drainage sewer on Plessis Road north of the CNR Mainline to divert part of the flow when there are high water levels in the Dugald Ditch.

The sand bags, the temporary pump and the land drainage sewer interconnection are all considered short-term solutions to the long-term problem in South Transcona. Spring runoff caused flooding in South Transcona in 1995.

On April 9, 1996, the Committee on Works and Operations considered Administrative report entitled, South Transcona Land Drainage, dated April 1, 1996, outlining alternatives to alleviate flooding in South Transcona, and directed the Administration to determine if there are any surplus funds from past Capital budgets or other funding options with respect to Alternative 1996 - B outlined in the report (shown on Appendix B and C), with a view to a 50-50 cost share of a 3.5 million dollar budget for the Storm Water Retention Basin (SRB) project with the Province of Manitoba.

On May 15, 1996, Councillor Timm-Rudolph, together with representatives from the Water and Waste Department, held a public meeting for residents of South Transcona and the Rural Municipality of Springfield on proposed drainage alternatives.

The proposed alternative to alleviate flooding in the South Transcona area incorporates a stormwater retention basin and a pump station at the northwest corner of Murdoch Road and St. Boniface Road. The plan involves diversion of approximately two square miles of Dugald Ditch watershed area (half of which is in the Rural Municipality of Springfield) to the SRB and to the St. Boniface ditch by regrading existing local ditches. In addition to a new retention basin, this alternative includes some minor or moderate channel and culvert upgrades to the St. Boniface Road ditch/Bibeau Drain system (Appendices D and E illustrate the Existing Watershed Location Plan and the proposed Bibeau Watershed Location Plan respectively). Overall, the proposed drainage system should provide a level of service for an event slightly greater than what occurred this past spring or a 25 year event. Design parameters are included in Table 1, designated as Appendix A. The cost of this alternative is estimated to be $3.5 million, including contingencies and burdens.

The primary benefit of the proposed alternative is flood protection from overland flow which is accommodated by temporarily storing the flows in the retention basin and subsequently pumping the flows into the existing ditches in the Bibeau Drain system once ditch water levels have receded. There is a reduced level of reliance on the downstream ditch system during the spring runoff event because of the SRB component. Secondary benefits of this alternative are: 1) it is consistent with the long term regional land drainage plan for the area, and; 2) its size requirement for land drainage runoff control is approximately the minimum size required for a water ski facility, which is being investigated by the Manitoba Water Ski Association for the 1999 Pan Am Games and for longer term use.

New capital funds are required to construct the proposed land drainage works. It is suggested that The Province of Manitoba be requested to provide $1.75 million (50% of the estimated $3.5 million project cost) inasmuch as approximately 50% of the problem (the land drainage runoff) and 50% of the benefitting lands are within the Rural Municipality of Springfield.

The options for financing $1.75 million for this project by the City are: 1) a local improvement by way of a special assessment levy district; 2) city-at-large, or; 3) a combination of a local improvement and city-at-large.

There are two concerns associated with the local improvement options. Firstly, there is only one opportunity to finance a regional land drainage system for a specified area by successful local improvement. The proposed trunk land drainage works are, in a sense, part of an interim drainage system that will be designed for and service the

**Report of the Committee on Works and Operations dated June 4, 1996**

existing land use which is primarily rural residential/agricultural. If and when future more intense development occurs, a more formal land drainage system will be required including more retention basins and new trunk sewers. If the trunk land drainage works proposed at this time are advertised as a local improvement, the City will not be able to advertise a local improvement for the ultimate trunk system required in the future for more intense development for the same benefitting lands.

An alternative would be to advertise, and if successful, install the ultimate trunk drainage system required for the area, which is estimated to cost in excess of $10 million, or three times the cost of the proposed works. Even if the local improvement for the ultimate trunk system were successfully advertised, suburban residential development will require a change in the zoning designation from "Rural" to "Neighbourhood" which requires Provincial approval as a Plan Winnipeg Amendment. Further, development is likely to proceed over several years and the drainage systems would be under-utilized during that period but still require maintenance.

Secondly, is the difficulty in applying a uniform local improvement rate to all benefitting properties that is fair and equitable, as required by The City of Winnipeg Act. The total lands within the City benefitting from the proposed works include two square miles, half of which (including the Hamlet) will not be drained by the new works but will continue to be drained by the Dugald Ditch. The benefit to these lands is that the water that has caused the flooding in the past will be diverted away by the proposed works.

Any funding for this project by the City-at-large will have to be included in the 1997 Capital Estimates and financed by tax supported debt financing. There is insufficient unused borrowing authority in the land drainage category for 1996 or earlier capital approved projects.

The Committee on Works and Operations therefore recommends:

I. That $1.75 million for the Stormwater Retention Basin alternative be financed in the 1997 Capital Estimates by tax supported debt financing.

II. That the Province of Manitoba be requested to cost share on a 50-50 basis for the Stormwater Retention Basin.

III. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

In amendment,

*The Executive Policy Committee recommends as follows:*

*I. The stormwater retention basin alternative, at an estimated total cost of $3.5 million, be the preferred alternative to alleviate overland flooding in the South Transcona area, subject to Provincial cost-sharing;*

*II. The Intergovernmental Affairs Committee request the Province of Manitoba to cost share on a 50-50 basis for the stormwater retention basin alternative;*

*III. The City's portion of the cost for the stormwater retention basin alternative, amounting to $1.75 million, be financed in the 1997 Capital Estimates by tax supported debt financing, contingent on the Province of Manitoba approving their equivalent share of the cost;*

*IV. The City endeavour to recover its portion of the cost of the stormwater retention basin alternative from the benefitting lands within the City if and when future more intense development occurs, in accordance with the development agreement parameters.*

*V. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.*

Copy of attachments referred to in the above clause are on file in the office of the City Clerk.

Adopted by consent.

**Report of the Committee on Works and Operations dated June 4, 1996**

**Waste Minimization Strategy for Winnipeg**
**File WT-1.3 (Vol. 18)**

**795 -** 2. On July 11, 1990, Council approved the Waste Minimization and Recycling Action Plan which is directed largely towards composting and the creation of recycling depots.

On November 2, 1993, the Committee on Works and Operations concurred with the Ad Hoc Committee on Waste Reduction that it be charged with the responsibility of developing a comprehensive, integrated plan for waste reduction that will incorporate initiatives underway as well as new initiatives in order to formulate a comprehensive plan.

On April 28 and 29, 1994, the Waste Minimization Advisory Committee held a planning session attended by Ad Hoc Committee members and the Administration Staff, which established a key issue as the "need to revisit the current Waste Minimization and Recycling Action Plan", requiring the development of an Integrated Waste Reduction Plan that might include the consideration of business plan, targets, goals, objectives, flexibility, accountability, responsiveness to change, etc.

At its June 23, 1994 meeting, the Waste Minimization Advisory Committee established the "need" to revisit the Waste Minimization and Recycling Action Plan and "how" this could be achieved, with the Ad Hoc Committee on Waste Reduction and senior Works and Operations staff. The following information was presented and discussed in regards to "need":

1. Lack of clearly stated goals and objectives in the Plan
2. No targets that the Plan can be monitored against
3. No action statement within the Plan regarding public consultation and education
4. The plan does not contemplate where funding is going to come from and how it might be generated
5. There is no plan for the market development of recyclables
6. There is no plan for the monitoring of progress and lines of accountability for lack of progress
7. The plan does not take us forward towards integrated decision making
8. Waste is not recognized within the plan as a natural resource
9. Public's desire for an environmentally sound city is not recognized

The following information was presented and discussed in regards to "how":

1. WMAC to Draft Terms of Reference for approval of the Committee on Works and Operations
2. WMAC to work in conjunction with the consultant, monitoring and reporting progress to the Ad Hoc Committee on Waste Reduction
3. WMAC to develop a framework for public consultation for plan development and completion of final draft plan
4. WMAC will continue to research what other groups are doing to identify further options
5. The time line for the project would be September 30, 1994 to July 31, 1995
6. The proposed budget for the planning exercise is $100,000.00; $25,000.00 to be provided from the WMAC budget

Meeting participants unanimously agreed that the Waste Minimization and Recycling Action Plan should be revisited. It was recommended that the WMAC develop a Draft Terms of Reference and formally request funding from the Committee on Works and Operations.

At its July 21, 1994 meeting, the WMAC agreed to a Draft Terms of Reference that will include the following responsibilities over two phases:

Phase 1

The development of a decision-making model that is at a minimum iterative, forward looking, responds to changing issues and temporal scales, identifies players and their roles, outlines monitoring and reporting procedures with public involvement in the development of the model.

**Report of the Committee on Works and Operations dated June 4, 1996**

Phase 2

Subject to the satisfactory completion of Phase 1, and budgetary approval, Phase 2 will involve the implementation of the decision making model in the development of the first action plan. At a minimum this phase should outline the historical background to waste management in the City, facilitate public consultation to identify gaps in the current waste management system and options to fill them, establish goals and objectives for the first plan to be measured against, etc.

Council on September 21, 1994 adopted the recommendation as contained in Clause 4 of the Report of the Committee on Works and Operations dated September 2, 1994 that a consultant be retained to develop a Waste Reduction Action Plan to be completed over the period 1994/95, at an estimated cost not to exceed $100,000.00.

Subsequently, the Commissioner of Works and Operations approved assignment of the project to REIC Ltd. and InterGroup Consultants Ltd.

On June 4, 1996, the Chairperson of the Waste Minimization Advisory Committee presented the Waste Minimization Strategy for Winnipeg dated June 1996 to the Committee on Works and Operations and recommended approval thereof.

The Committee on Works and Operations therefore recommends:

I. That the Waste Minimization Strategy for Winnipeg dated June 1996, designated as Appendix A, be adopted, thereby replacing the Waste Minimization and Recycling Action Plan.

II. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Appendix A referred to in the above clause is on file in the office of the City Clerk.

For the information of Council, the Committee on Works and Operations has requested that the Administration bring forward a specific action plan from this document including financial implications and implementation strategy.

Adopted by consent.

**Approval for Funding Transfer for the Gallagher Avenue/Keewatin Street Combined Sewer Renewal**
**File WS-5 (Vol. 17)**

**796 -** 3. The Committee on Works and Operations has been advised that over the last year extensive repairs have been undertaken by the maintenance crews of the Water and Waste Department on the section of pipe under Gallagher Avenue from Dee Street to Keewatin Street, and under Keewatin Street from Gallagher Avenue to Logan Avenue. The sewer continues to collapse notwithstanding the repair efforts in addressing the ongoing failures of the sewer.

It has been determined that the aforementioned section of the pipe is in extremely poor condition with sections of the pipe in a condition of imminent failure

The Administration has recommended that the Construction Branch of the Streets and Transportation Department undertake replacement of the subject section of the pipe immediately. The delay in going out for tender for this project could be up to 3 weeks and could increase the risk of sewage back-up to residences in the area. The Construction Branch will adjust its workload by delaying or tendering other projects.

**Report of the Committee on Works and Operations dated June 4, 1996**

| Financial Status - Combined Sewer Renewal Project | | |
|---|---|---|
| Combined Sewer Renewal Reserve Available | | $ 810,154.95 |
| Gallagher/ Keewatin Sewer Renewal: | | |
| Estimated Construction Cost | 360,000.00 | |
| Engineering (16%) | 60,000.00 | |
| Contingency | 36,000.00 | |
| GST (3%) | 14,000.00 | |
| Total Estimated Cost | 470,000.00 | 470,000.00 |
| Estimated Combined Sewer Renewal Reserve Residual | | $ 340,154.95 |

UMA Engineering Inc. is performing the engineering services for the design, specifications and installation of this project.

In view of the urgency associated with the project, the Committee on Works and Operations recommends:

I. That approval to proceed immediately with the renewal of the combined sewer under Gallagher Avenue from Dee Street to Keewatin Street, and under Keewatin Street from Gallagher Avenue to Logan Avenue be granted.

II. That funding of $470,000.00 for the subject project be funded from the Combined Sewer Renewal Reserve.

III. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Adopted by consent.

**Approval for Funding Transfer for Watermain Renewals under Portage Avenue, Greenwood Place, Morgan Crescent and Morrison Street**
**File WW-2.4(31) (Vol. 1)**

**797 -** 4. The Committee on Works and Operations has been advised that maintenance problems have been experienced with the watermains under Portage Avenue from Aubrey Street to Minto Street, Greenwood Place from 300 metres south of Portage Avenue to Portage Avenue, Morgan Crescent from Cavalier Drive to Highcliff Bay and Morrison Street from Buttercup Avenue to Arrowwood Drive North, over the last number of years.

On July 12, 1995, the Committee on Works and Operations approved for construction in 1995 the Portage Avenue Watermain Renewal from Dominion Street to Sherburn Street.

Funds in the amount of $1,201,000.00 were included in the 1996 Watermain Renewal Program Allowance for Unforeseen.

Presently, one length of watermain under Portage Avenue has been shut off to isolate a leak which has not been repaired to date. Extending the previously approved Portage Avenue watermain renewal to include a longer portion of Portage Avenue as well as a portion of Greenwood Place will incorporate locations of additional leak repairs as well as minimize future traffic and customer service interruptions.

Over the past few years, a significant number of leaks have required repair on Morgan Crescent. During one of the repairs, a fire hydrant, located in front of a school, had to be taken out of service and, due to the condition of the existing watermain, the hydrant has not been returned to service. It is necessary to complete the subject renewal prior to August 15, 1996, to ensure that the school has adequate fire protection for the 1996/97 school year. The Water and Waste Department advises that this watermain renewal could be included in a contract consisting of other 1996 watermain renewals in the area, scheduled to be tendered in early July.

**Report of the Committee on Works and Operations dated June 4, 1996**

A number of watermain leaks on Morrison Street over the past few years have resulted in service interruptions and surface restoration and considerable inconvenience to residents on the street.

| Financial Status - Watermain Renewal Projects | | |
|---|---|---|
| Allowance for Unforeseen Available | | $1,082,687.00 |
| Portage, Greenwood, Morgan and Morrison Watermain Renewals: | | |
| Estimated Construction Cost | | |
| Portage Avenue | $77,500.00 | |
| Greenwood Place | 97,000.00 | |
| Morgan Crescent | 103,500.00 | |
| Morrison Street | 80,000.00 | |
| Sub-Total | 358,000.00 | |
| Engineering (15%) | 53,700.00 | |
| Miscellaneous (Utilities and Testing) | 3,600.00 | |
| Sub-Total | 415,300.00 | |
| Contingency (10%) | 41,500.00 | |
| Sub-Total | 456,800.00 | |
| GST (3%) | 13,700.00 | |
| Total Estimated Cost | 470,500.00 | |
| Estimated Allowance for Unforeseen Residual | | $ 612,187.00 |

Council approval is required for projects funded from the Watermain Renewal Program Allowance for Unforeseen.

The Committee on Works and Operations therefore recommends:

I. That funding in the amount of $486,000.00 for the renewal of the watermains under Portage Avenue from Aubrey Street to Minto Street, Greenwood Place from 300 metres south of Portage Avenue to Portage Avenue, Morgan Crescent from Cavalier Drive to Highcliff Bay, and Morrison Street from Buttercup Avenue to Arrowwood Drive North, be drawn from the 1996 Watermain Renewal Program Allowance for Unforeseen.

II. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Adopted by consent.

**Corrosion Prevention Pilot Project**
**File WW-2.4 (Vol. 8)**

**798 -** 5. The Committee on Works and Operations has been advised that the Watermain Renewal Fund was established in 1980 to replace corroding cast iron and ductile iron watermains in the City of Winnipeg. Since 1992 the annual replacement budget has been 12 million dollars per year.

In 1991, the City began installing sacrificial anodes at leak repairs in the watermain system to reduce the rate of corrosion. As a result, the annual rate of watermain breaks has dropped to about one half of the former rate, from 2200 breaks per year to 1100 breaks per year.

In early 1996, a corrosion prevention course was prepared and delivered to over 160 Water and Waste Department Staff, Engineers, and Consulting Engineers, to better support this initiative.

**Report of the Committee on Works and Operations dated June 4, 1996**

It is evident from this program that our present approach to cathodic protection is effective. It is estimated that for every dollar spent, the city earns three dollars back over the following 7 to 10 years.

The current watermain renewal program is based on the recommendations in CH2M Hill's Engineering's reports of 1984 and 1986. These studies concluded that full cathodic protection of mains would not likely be effective, utilizing technology then available. The success of the present anode placement program has exceeded our expectations. Based on this experience, we believe that the results of a full cathodic protection program would exceed the estimates made in 1986. Experience in other jurisdictions with similar soil conditions supports this view. For example, an Impressed Current cathodic protection system recently installed in Beausejour, Manitoba has resulted in significant benefits over the past two years.

With this background, it is recommended that a pilot project consisting of study, design, installation and monitoring of a full Cathodic Protection system be undertaken. In order to obtain meaningful results, the pilot project should study a significant length of pipe, ie., about 10 kilometres.

It is desirable that this project be undertaken as soon as possible. Inasmuch as the life of the anodes placed at leak repairs is about 7 to 10 years, and consequently the rate of watermain leaks may soon increase as the anodes installed 5 years ago start to wear out.

The cost of an Impressed Current system is estimated at approximately 10% of the replacement cost of the watermain. If the pilot project proves successful, some portion of the existing mains could be protected on an on-going basis, and may not need to be renewed for 50 to 100 years. This would defer capital expenditure, reduce leak frequency and bring down the current cost of leak repairs.

One of the objectives of the pilot project would be to provide better information concerning the economics of cathodic protection versus 100% renewal of mains over the next 40 years.

Some other objectives of the CP pilot project would be to:

1. Develop Design Standards by determining which of the new cathodic protection technique is best (lowest long term cost) for Cast Iron and Ductile iron pipes.

2. Develop a Maintenance Plan by determining the long term maintenance costs associated with impressed current cathodic protection systems.

3. Develop a Budget, that is, what the preferred rate of installation of cathodic protection, given the financial realities of the city.

4. Develop a Work Plan and Work Standards by determining what installation technique works the best for Winnipeg, considering that impressed current installations would probably be undertaken in the summer, and local anode installations can be effected during the winter by City crews as well as contractors.

5. Identify the impacts on the other utilities such as gas and hydro.

The estimated costs of the pilot program are as follows:

| | |
|---|---:|
| Engineering | $150,000 |
| Materials | $225,000 |
| Installation | $125,000 |
| Total | $500,000 |

The estimated operating cost of an Impressed current system for 10 km of pipe per year is $2000 for Hydro, and $3000 per year for monthly maintenance checks of the impressed current rectifiers.

A corrosion specialist company with direct experience in this field could most effectively deliver the services relating to the preliminary engineering study (Phase I), the trial installation (Phase II), and the full program report and recommendations (Phase III). We have only been able to locate one specialist consultant (CORENG) with the desired qualifications.

**Report of the Committee on Works and Operations dated June 4, 1996**

Accordingly, the Administration has recommended that a direct assignment of engineering services be made to CORRENG, subject to receipt of a satisfactory engineering proposal. CORRENG has an extensive body of experience. The company has recently directed installation of 6.5 kilometres of Impressed Current cathodic protection system in Beausejour, Manitoba, after which the leak rate dropped from 4 per kilometer per year to zero in two years.

The Committee on Works and Operations therefore recommends:

I. That $150,000 be allocated from the Engineering/Administration Component of the watermain renewal budget to fund Professional Engineering Services relating to the study, design and monitoring of a watermain corrosion prevention pilot project.

II. That direct assignment be made to CORRENG CONSULTING SERVICE INC., of 369 Rimrock Road, Downsview, Ontario, for the Professional Engineering Services for the pilot project.

III. That $350,000 for construction of the Pilot Cathodic Protection System for 10 km of watermain be allocated from the Engineering/Administration Component of the watermain renewal budget.

IV. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Adopted by consent.

**Ornamental Lane Lights on all lanes in the block bounded by Larkspur Drive, Groverdale Avenue, Garden Grove Drive, Wendon Bay and Burrows Avenue - 1996 Local Improvement - Lord Selkirk-West Kildonan Community**
**File SL(1996) (Vol. 1)**

**799 -** 6. On May 17, 1995, Council adopted Clause 2 of the report of the Committee on Works and Operations dated May 4, 1995, thereby approving the installation of ornamental lane lights on all lanes in the block bounded by Larkspur Drive, Groverdale Avenue, Garden Grove Drive, Wendon Bay and Burrows Avenue, as local improvements to be funded from 1995 Local Improvement Borrowing Authority, subject to successful advertising.

However, in view of the fact that on October 10, 1995, a successful “petition for” the subject improvements was received from Mr. M. Larson, a resident of Wendon Bay, containing signatures representing 66.11% of the total assessable frontage, the project was not required to be advertised in accordance with Section 362 of The City of Winnipeg Act.

The Streets and Transportation Department have advised that sufficient funds are not available in the 1995 Local Improvement Account for the subject improvements and have recommended that the project proceed with funds in the amount of $16,000.00 to be drawn from the 1996 Local Improvement Account.

In view of the foregoing, the Committee on Works and Operations recommends:

I. That ornamental lane lights on all lanes in the block bounded by Larkspur Drive, Groverdale Avenue, Garden Grove Drive, Wendon Bay and Burrows Avenue be approved for installation as local improvements, with funds in the amount of $16,000.00 to be drawn from the 1996 Unused Borrowing Authority, Local Improvement Category.

II. That the City Solicitor/Manager of Legal Services be requested to prepare the necessary Local Improvement By-law in accordance with the foregoing and submit same directly to Council for approval.

III. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Adopted by consent.

**Report of the Committee on Works and Operations dated June 4, 1996**

**Adoption of Design Alternative and Award of Contract for Nairn Avenue - Grey Street to Panet Road - Reconstruction and Widening and Watermain Renewal - Tender No. P.D. 96-056**
**File GL-9 (Vol. 8)[c/r SC 3.11(33) (Vol. 1) and WW-2.4(33) Vol. 1)]**

**800 -** 7. The Committee on Works and Operations has been advised that the 1995 Capital Estimates approved by Council on December 4, 1994 included $845,000.00 for property acquisition and engineering design for Nairn Avenue between Grey Street and Panet Road.

On April 26, 1995, a Public Open House was held to present the Project and solicit suggestions and comments from the public and businesses.

On June 5, 1995, the project and the results of the Open House were presented to the East Kildonan-Transcona Community Committee Conference.

On December 20, 1995, Council confirmed the Expropriation By-Law No. 6687/95.

The Nairn Avenue Combined Sewer Renewal P.D. 95-199 approved by the Committee on Works and Operations on February 6, 1996 includes $400,000.00 for pavement restoration cost.

On February 28, 1996, Council adopted the 1996 Capital Estimates and the 1997-2001 Five-Year Capital Forecast which included funds for Nairn Avenue from Grey Street to Panet Road as follows:

1. That $1,956,000.00 be included for eastbound Nairn Avenue;

2. That the balance of the Nairn Avenue Project in the amount of $2,374,000.00 be a first call against the 1997 Capital Estimates.

At the April 9, 1996 meeting of the Committee on Works and Operations, the Administration was instructed to proceed to Tender for the Nairn Avenue Project with two (2) alternatives, a raised median with left-turn storage lanes and a two-way left-turn lane.

On April 24, 1996, Council approved that funding for the renewal of the watermain under Nairn Avenue from Grey Street to Panet Road be accommodated through the Watermain Renewal Reserve.

Final Receipt of Bids was 12:00 Noon on May 14, 1996. Six (6) bids were received as follows:

| | Alternative #1<br>Raised Median | Alternative #2<br>Two-Way Left Turn Lane |
|---|---|---|
| Nelson River Construction Inc. | $3,825,586.75 | $4,007,456.75 |
| Borland Construction (1989) Limited | 3,935,525.00 | 4,164,362.50 |
| C.J. Rental and Contracting Ltd. | 4,065,526.75 | 4,300,882.25 |
| Pourex Limited | 4,092,050.50 | 4,365,605.50 |
| Mulder Construction and Materials Ltd. | *4,234,544.40 | 4,337,300.00 |
| Maple Leaf Construction Ltd. | 4,445,622.50 | 4,696,422.50 |

* Corrected Price - Arithmetic Error in total of unit prices

Easements and signs are required for Alternative 2 increasing the total Project Cost for Alternative 2 by $330,000.00 and $13,500.00 respectively.

The Tender Submission recommended for acceptance is the lowest evaluated responsive Bid meeting all requirements of the published Tender Package except as noted in the tabulation of tenders (a listing of the sub-contractors and suppliers identified by the Low Bidder is outlined in Appendix A).

**Report of the Committee on Works and Operations dated June 4, 1996**

The Bidding Instructions for Tender No. 96-056 Nairn Avenue - Grey Street to Panet Road - Reconstruction and Widening and Watermain Renewal include the following:

Two alternative designs (1 and 2) are included in the plans and specifications for the accommodation of turning traffic on Nairn Avenue. The decision on which alternative will be adopted will be made by Council prior to the Award of this Contract, taking into consideration safety, the estimated total project cost of each alternative, access of property, aesthetics, any difference in on-street parking and the results of public consultation. The alternative that is not adopted by Council will not be considered for award.

Accordingly, a total of $343,500.00 will be added to the tendered price of Alternative 2.

Project Description:
Part A and B of this Project consists of the reconstruction and widening of 1.75 km of Nairn Avenue from Grey Street to Panet Road to address the existing capacity, traffic operation and infrastructure deficiencies. Nairn Avenue is a four-lane undivided facility between 70 m east of Grey Street and 70 m west of Stapleton Street and carries 30,600 vehicles in 12-hours. Nairn Avenue from 70 m east of Grey Street to Watt Street is a four lane divided arterial street. From 70 m west of Stapleton to Panet Road, Nairn Avenue is a four-lane divided street. East of Panet Road, Nairn Avenue becomes Regent

Avenue, a six-lane divided arterial street. Part C of this Project is the Watermain Renewal from Grey Street to Panet Road.

The Nairn Avenue right-of-way between Grey Street and Panet Road has been widened from 20.117 m to 24.382 m on the south side to accommodate the widening. Corner cuts have been obtained to accommodate turning trucks at the intersections on the south side of Nairn Avenue.

The Nairn Avenue - Grey Street to Panet Road Reconstruction and Widening and Watermain Renewal Project has been tendered with two alternatives. Both alternatives are identical except for the section between 70 m east of Grey Street and 70 m west of Stapleton Street. The following is a description of the two alternatives:

Alternative 1 - Raised Centre Median with Left-Turn Storage Lane

This alternative is a typical four-lane divided street with a raised median. Both eastbound and westbound left-turn storage lanes will be provided at all street intersections. One or two mid-block median openings will be provided in each block to accommodate mid-block access and U-turns.

Alternative 2 - Two-Way Left-Turn Storage Lane

This alternative is a five-lane undivided street. The centre lane would accommodate left-turns in both directions. The operation would be similar to St. James Street between Portage Avenue and Maroons Road. Overhead signs are required to designate the use of the centre lane.

The two alternatives have been evaluated on the basis of safety, total estimated project costs for each alternative, access to property, aesthetics, and difference in on-street parking and results of public consultation.

Safety

Alternative 1 - Raised Median Advantages:

1. Collision rate predicted to be reduced. The introduction of a raised median typically reduces the collision rate by between 5% and 80%. The City-wide collision rate for all four-lane divided streets is 4.8 collisions per million vehicle kilometres compared to the two-way left-turn section of St. James Street rate of 21.3 collisions per million vehicle kilometres.
2. Separates opposing traffic flow eliminating head-on collisions.
3. Provides positive guidance to motorists defining the through and turning lanes.
4. Allows turning traffic to store out of the path of through traffic.
5. Provides a refuge for pedestrians so they can cross one direction of traffic at a time.
6. Physically prevents undesirable and illegal manoeuvres.
7. Defines where turns may occur eliminating continuous conflict zones.
8. Median accommodates traffic control devices ie. signs and signal poles.

**Report of the Committee on Works and Operations dated June 4, 1996**

Raised Median Disadvantages:

1. Slight increase in fixed object collisions involving the median.

Alternative 2 - Two-Way Left-Turn Lane Advantages:

1. Provides a lane for left-turning vehicles to store out of the path of through traffic.
2. U-turns are not required.

Two-Way Left-Turn Lanes Disadvantages:

1. Collision rate predicted to increase based on the existing collision rate on the two-way left-turn section of St. James Street.
2. There are conflicting vehicle manoeuvres at private approaches particularly when the approaches are close together at adjacent properties.
3. There is no refuge area for pedestrians.
4. Undesirable when access is primarily on one side of the street as on Nairn Avenue.
5. Some motorists may use as a passing lane or drive for excessive distances in the two-way left-turn lane.
6. Pavement markings are obscured during winter months.
7. Some motorists are unfamiliar and/or confused about proper use.

Total Project Cost

The total project cost estimate for Alternative 1 - raised median is $6,622,381.00.

The total project cost estimate for Alternative 2 - centre two-way left-turn lane is $7,172,381.00.

Alternative 1 costs $550,000.00 less than Alternative 2.

If Alternative 2 is adopted, 18 easements are required for the 9 overhead sign structures. In order for the Contractor to install the overhead signs as required in this Contract, the Land and Development Services Department must be authorized to prepare the necessary Expropriation By-Law.

Access to Property

There are a total of 38 businesses on the south side of Nairn Avenue between Grey Street and Stapleton Street, 18 of these businesses are on properties that have access to the intersecting north south streets. Two businesses have private approaches for deliveries off Cole or Thomas Avenues.

Alternative 1 - Raised Median:

The raised median alternative provides eastbound and westbound left-turn storage lanes at all intersections. These are of sufficient length to store all turning traffic. This will accommodate access to all corner properties and to properties with access off Thomas Avenue and Cole Avenue. In addition, one or two mid-block westbound left-turn storage lanes are provided in each block to accommodate mid-block property access. Where possible these are located on property lines to serve two properties. Many of the businesses have interconnected front parking lots accommodating circulation between the businesses. The median openings currently approved by the Streets and Transportation Department provide access to 12 of the 19 mid-block businesses. Four of the remaining 7 businesses have access across adjacent properties.

The Streets and Transportation Department has indicated that if the businesses agree and if a safe design is possible the proposed median openings can be relocated. So far two median openings have been relocated. Owners who are concerned about median openings have been advised that the specific location can be reviewed with the Manager of Traffic Engineering and if not satisfactorily resolved will be submitted to the Committee on Works and Operations.

Alternative 2 - Centre Two-Way Left-Turn Lane:

The two-way left-turn lane option does not have a raised median and allows traffic in both directions to enter the centre lane to turn left. This option has fewer restrictions on access to property.

**Report of the Committee on Works and Operations dated June 4, 1996**

There are operational problems when private approaches are close to intersections (6 locations) and when private approaches are closely spaced (3 locations).

Aesthetics

Alternative 1 - Raised Median is more aesthetic given the medians with paving stones and planters.

Alternative 2 - Centre Two-Way Left-Turn Lane is less aesthetic given the overhead sign structures and the five lanes of concrete pavement.

Difference in On-Street Parking

Parking is permitted on the north side of Nairn Avenue except near bus stops and from 07:00 to 09:00 and 15:30 to 17:30, Monday to Friday.

The westbound through traffic between 09:00 and 15:30 is 1,150 vehicles per hour. This volume of traffic warrants the prohibition of parking during the day. However, this is desirable and recommended regardless of the alternative adopted. A separate report dealing with any changes in traffic and parking regulations will be provided in the fall of 1996.

Alternative 1 - Raised Median:

If parking is not prohibited during the day it will be necessary to prohibit parking for approximately 30 m on the far side of intersections and median openings to accommodate U-turns. As the actual number of vehicles parked on the street is low, this would only cause minor inconvenience.

Alternative 2 - Centre Two-Way Left-Turn Lane:

Two-way left-turn lanes typically do not have on-street parking. Where it is permitted it is usually on both sides of the street. Given the high volume of westbound through traffic during the off-peak, parking would encourage use of the centre lane for very long left-turns and passing of slower vehicles. It is recommended that no on-street parking be permitted if this alternative is adopted.

Public Consultation

At the public Open House on April 26, 1995 the raised median alternative was preferred by 59% of the respondents, the two-way left turn lane by 38%. The raised median was supported by 100% of the responding residents on the north side and 50% of the responding businesses. The project was also presented to the East Kildonan-Transcona Community Committee Conference on June 5, 1995 where the raised median was supported.

Public Consultation

The project consultant has met representatives of each of the businesses on the south side of Nairn Avenue to discuss access to their property with the proposed raised median and the proposed median openings. Representatives of the Streets and Transportation Department have also met with several property owners who have concerns to discuss access to their property or business.

A petition signed by representatives of 26 of the businesses has been received. Only 2 of these businesses were in favour of the raised median at the Open House. The petition makes no mention of the fact the raised median option has median openings and left-turn storage lanes. The petition requests the divider strip be excluded and a left-turn lane for west bound traffic be included.

The following are the conclusions based on the evaluation of the two alternatives:

1. Alternative 1 - the Raised Centre Median with left-turn storage lanes is safer for through traffic, turning traffic and pedestrians and is expected to result in a reduction in the collision rate.

2. Alternative 2 - the Two-way left-turn lane is less safe than the existing roadway and is expected to result in an increase in collision rate.

**Report of the Committee on Works and Operations dated June 4, 1996**

3. The total project cost of Alternative 1 is $550,000.00 less than Alternative 2.

4. Alternative 2 provides direct access to business with private approaches on Nairn Avenue.

5. Alternative 1 provides access to all properties with a U-turn required for westbound access to 7 businesses.

6. Alternative 1 is more aesthetic due to the median treatment and no overhead sign structures.

7. Assuming on street parking will remain on the north side on Nairn Avenue Alternative 1 is preferred because parking is undesirable with a two-way left-turn lane.

8. Alternative 1 is preferred by the residents on the north side of Nairn Avenue and approximately half of the businesses on the south side.

9. Some businesses on the south side want most opportunity for customers to turn left into their property. In some cases this can been addressed by adding additional median openings.

It is recommended by both the project consultant, UMA Engineering Ltd. and the Streets and Transportation Department that Alternative 1 the raised centre median with left-turn storage lanes be adopted because it is safer, costs $550,000.00 less, provides suitable access to businesses on the south side, is more aesthetic, is suitable for retaining on-street parking, and is the preferred alternative in the public consultation with residents and businesses.

The financial status of the project is as follows:

| Roadworks - Authorized Capital: | |
|---|---|
| Year - 1995, Amount - | $ 845,000.00 |
| Year - 1996, Amount - | $1,956,000.00 |
| First call against 1997 Capital Estimates | $2,374,000.00 |
| Nairn Combined Sewer Renewal P.D. 95-199 Pavement Restoration | $ 400,000.00 |
| TOTAL Roadway Budget Appropriations | $5,575,000.00 |

| | Alternative 1 | Alternative 2 |
|---|---|---|
| Amount of Previous Awards: | NIL | NIL |
| Amount of this Contract Award (Part A & B): | 3,057,302.75 | 3,239,172.75 |
| Contingencies: | 152,865.00 | 161,959.00 |
| Engineering & Testing: | 524,701.00 | 524,701.00 |
| Street Lighting: | 250,000.00 | 250,000.00 |
| Traffic Signals: | 500,800.00 | 500,800.00 |
| Hydro: | 41,000.00 | 41,000.00 |
| M.T.S. | 5,400.00 | 5,400.00 |
| Traffic Services: | 42,000.00 | 55,500.00 |
| Repair to Mission Street: | 74,500.00 | 74,500.00 |
| Finance & Administration Charges: | 202,433.00 | 212,770.00 |
| GST: | 113,000.00 | 118,200.00 |
| Property Acquisition: | 700,000.00 | 700,000.00 |
| Estimated Total Roadway Project Cost: | 5,653,000.00 | $ 6,203,000.00 |
| Estimated Shortfall | (78,000.00) | $ (628,000.00) |

The Consulting Engineer, UMA Engineering Ltd., for the Nairn pavement reconstruction has recommended that the watermain renewal under Nairn Avenue from Grey Street to Panet Road should be renewed in September 1996 so that the balance of the Nairn Avenue street reconstruction can be completed in 1997. The timing for the watermain renewal is critical as the construction works of the street reconstruction is extensive and any delay to the street works would reduce the possibility of completion of the reconstruction works in 1997.

| Watermain Renewal (Part C) | | |
|---|---|---|
| Watermain Renewal Reserve Available | | $1,567,502.35 |
| Nairn Watermain Renewal: | | |
| Amount of this Contract Award (Part C) | $ 768,284.00 | |
| Engineering | $ 92,194.00 | |
| Contingencies | $ 76,828.00 | |
| Materials Testing | $ 3,841.00 | |
| Sub-Total | $ 941,147.00 | |
| GST (3%) | $ 28,234.00 | |
| Total Estimated Cost | $ 969,381.00 | $ 969,381.00 |
| Estimated Watermain Renewal Reserve Residual | | $ 598,121.35 |

The lapse date for the award of this Contract is July 12th, 1996.

The Manager of the Materials Management Division has advised that each of the Tender Submissions included Bid Security and a Written Undertaking to provide Performance Security, and the City Solicitor/Manager of Legal Services has advised that all of same are in order.

The Engineering Consultant has reviewed the Tender Submissions in detail and has indicated that the bid of Mulder Construction & Materials Ltd. was incomplete and/or incorrect in some respects, as noted in the tender tabulation. However, none of the Tender Submissions were found to be sufficiently incomplete or incorrect as to render the bids received non-responsive.

The Engineering staff of the Department and the Consultant on this project have reviewed the work with the lowest evaluated responsive Bidder who has indicated that the firm has the necessary resources to perform all of the work in accordance with the requirements of the published Tender Package. The Contractor has satisfactorily carried out previous construction works of a similar nature for the City of Winnipeg.

Based on the lowest Tender Submission for Alternative 1 by Nelson River Construction Ltd., the total cost of the Roadwork Part A & B including contract works, roadway lighting, traffic signals, traffic signing, engineering, contingencies, and finance and administration charges and GST is estimated to be $5,653,000.00 representing an expected budgetary shortfall of $78,000.00 or 1.4%.

Therefore it will be necessary to increase the first call against the 1997 Capital Estimates by $78,000.00 from $2,374,000.00 to $2,452,000.00. This shortfall is the result of adding $164,000.00 to the project to undertake repairs to the asphalt on Mission Street and to add temporary traffic signals on Mission Street at rue Archibald.

The Administration has recommended that a Contract (Parts A, B & C) be awarded to Nelson River Construction Ltd. which firm submitted the lowest evaluated responsive Bid meeting all requirements of the published Tender Package in the estimated amount of $3,825,586.75 based on the unit prices identified in the low Bidder's Tender Submission for the Nairn Avenue Reconstruction and Widening and Watermain Renewal - Tender No. P.D. 96-056.

In the event Alternative 2 - the two-way left-turn is adopted based on the lowest tender submission for the Roadwork Part A & B estimated to be $6,203,000.00 there is a budget shortfall of $628,000.00 or 11.30%. It will be necessary to approve new additional funding for the 1996 in the amount of $400,000.00 and to increase the first call in the 1997 Capital Estimates by $228,000.00. In addition it will be necessary to authorize the Director of Land and Development Services Department to begin expropriation proceedings for the 18 easements required.

**Report of the Committee on Works and Operations dated June 4, 1996**

If Alternative 2 - the two-way left-turn lane is adopted the Contract would be awarded to Nelson River Construction Ltd. which firm submitted the lowest evaluated responsive Bid meeting all requirements of the published Tender Package in the estimated amount of $4,007,456.75 based on the unit prices identified in the low Bidder's Tender Submission for the Nairn Avenue Reconstruction and Widening and Watermain Renewal - Tender No. P.D. 96-056.

Council approval is required for an increase in the First Call against the 1997 Capital Estimates to provide adequate funding and authorize the Award of Contract.

The Committee on Works and Operations therefore recommends:

I. That Alternative 1 raised median with left turn storage lanes be adopted as the recommended design for the Nairn Avenue - Grey Street to Panet Road - Reconstruction and Widening and Watermain Renewal Project.

II. That the first call against the 1997 Capital Estimates for the Nairn Avenue Project be increased by $78,000.00 from $2,374,000.00 to $2,452,000.00.

III. That a Contract be awarded to Nelson River Construction Inc., which firm submitted the lowest evaluated responsive Bid meeting all requirements of the published Tender Package in the estimated amount of $3,825,586.75 based on the unit prices identified in the low bidder's Tender Submission for Nairn Avenue - Grey Street to Panet Road - Reconstruction and Widening and Watermain Renewal Project - Tender No. P.D. 96-056.

IV. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Moved by Councillor Clement,
Adoption of the clause.

The Speaker called the Deputy Speaker, Councillor Prystanski, to the Chair.

The motion for the adoption of the clause was put.

The Deputy Speaker called for the yeas and nays, which were as follows:-

Yea: Councillors Lubosch, Murray, Thomas and Vandal. 4

Nay: Councillors Clement, Golden, Lazarenko, Phillips, Silva, Steek, Timm-Rudolph, Deputy Mayor Eadie, Her Worship Mayor Thompson and Councillor Prystanski. 10

and the motion for the adoption of the clause was declared lost.

Moved by Councillor Golden,
Seconded by Councillor Lazarenko,

BE IT RESOLVED:

I. That alternative 2, namely, a two-way left-turn storage lane be approved as the design for the Nairn Avenue-Grey Street to Panet Road - reconstruction and widening and watermain renewal project

II. That an additional $400,000.00 be approved to be drawn from 1996 capital funds

III. That the first call against the 1997 Capital Estimates for the Nairn Avenue project be increased by $228,000.00

**Report of the Committee on Works and Operations dated June 4, 1996**

IV. That the Director of the Land and Development Services Department be authorized to commence expropriation proceedings for the 18 required easements;

V. That a contract be awarded to Nelson River Construction Inc., which firm submitted the lowest evaluated responsive bid meeting all requirements of the published tender package in the estimated amount of $4,007,456.75 based on the unit prices identified in the low bidder's tender submission for the Nairn Avenue reconstruction and widening and watermain renewal - Tender No. P.D. 96-056;

VI. That the proper officers of the City be authorized to do all things necessary to implement the foregoing, including the execution of any documents relative hereto.

The motion was put.

Councillor Thomas called for the yeas and nays, which were as follows:-

Yea: Councillors Clement, Golden, Lazarenko, Phillips, Silva, Steek, Timm-Rudolph, Her Worship Mayor Thompson and Councillor Prystanski. 9

Nay: Councillors Lubosch, Murray, Thomas and Vandal. 4

and the motion was declared carried.

Council here reverted to the order of business "Introduction and Welcome of Guests and Announcements".

## INTRODUCTION AND WELCOME OF GUESTS AND ANNOUNCEMENTS

**801** - The Deputy Speaker recognized in attendance Marianne Cerilli, Member of the Legislature for Radisson.

Council here proceeded to continue to consider the order of business - "The Report of the Committee on Works and Operations, dated June 4, 1996".

**Hired Hourly Dump Trucks - Annual Tendering File SC (Vol. 2)**

**802** - 8. Council, on January 31, 1996, considered Clause 1 of the Report of the Executive Policy Committee dated January 25, 1996 and adopted the 1996 Current Tax Supported Estimates as outlined in Schedule B to the clause.

As part of the recommendations contained in Schedule B, Council approved an item recommending that the City should move to an annual tendering process for rates when supplementing its fleet with trucks a from outside contractors for a potential savings of $100,000.

On April 9, 1996, the Committee on Works and Operations heard representation from various interest groups/companies. Committee also considered an Administrative report from the Commissioner of Works and Operations dated May 28, 1996 outlining changes to the process in accordance with the directive of Council that an annual tendering process be implemented for hired hourly dump trucks. Committee directed the Administration to review the matter in consultation with representatives of the Trucking Industry who appeared in delegation to discuss alternative options for report back.

Subsequently, on June 4, 1996, Committee again heard representation and considered a proposal submitted from the Independent Dump Truck Association of Manitoba relative to the process for a seniority list system to hire trucks. Committee concurred in the process and the following recommendations contained therein, with recommendation 3. added thereto as an amendment, namely:

**Report of the Committee on Works and Operations dated June 4, 1996**

1. The seniority list be the system used to hire trucks.

2. Increase the semi-trailer dump seniority to 40 trucks, taking into account the trucks that will be removed from the list. This will allow 14 to 15 firms to move into the main seniority list. There would be a maximum of 3 trucks hired per company from the list and then trucks on the spare list would be called. The spare list would consist of additional trucks.

3. That in a 24 hour period there must be a full rotation.

For the information of Council, in view of the foregoing, the savings contained in Schedule B appended to Clause 1 of the Report of Executive Policy Committee dated January 25, 1996, adopted by Council on January 31, 1996, relative to moving to an annual tendering process for rates when supplementing its fleet with trucks from outside contractors for a potential savings of $100,000.00 will not be realized for 1996.

A copy of the submission from the Independent Dump Truck Association of Manitoba, designated as Appendix A, is on file in the office of the City Clerk.

Moved by Councillor Clement,
Adoption of the clause.

Carried.

**Provision of Noise Attenuation Barriers as a Local Improvement**
**Files ER-1.2.1 (Vol. 4) & ST-5.2 (Vol. 22)**

**803 -** 9. On September 12, 1995, the Committee on Works and Operations considered a request from Andrea Roy, Chairperson of the Waverley Heights Concerned Residents Committee, together with a communication from Hymie Rubenstein, a resident of Augusta Drive, for the installation of a noise attenuation barrier along Waverley Street and Bison Drive. Committee requested the Administration to report back on the status of the ditch, noise levels, options and associated costs of installing a noise attenuation barrier. On November 16, 1995, the Committee on Works and Operations considered the Administrative report dated October 25, 1995 relative thereto and requested the Administration to report back on the feasibility of the installation as a Local Improvement. Subsequently, on January 9, 1996, the Committee on Works and Operations further directed that the Administration report back on charging the installation as a Local Improvement over a 10-year amortization.

On March 21, 1996, the Ward Councillor requested the Commissioner of Works and Operations to provide the estimated costs associated with the installation of a noise attenuation barrier as a local improvement so that the property owners may decide if they want to pay for something of this nature over the next ten years on their taxes.

On June 4, 1996, the Committee on Works and Operations considered a recommendation from the Riel Community Committee that the local improvement policy be amended to include the construction of noise attenuation barriers as local improvement projects.

Four options of noise attenuation barriers were estimated for cost and the level of predicted noise attenuation as outlined in report dated October 25, 1995, designated as Appendix D. The estimated costs have been upgraded to reflect current 1996 prices. The Local Improvements and Miscellaneous Revenue Branch has utilized these estimated construction costs to calculate the cost per frontage foot and the rates per frontage foot for a 5, 10, and/or 20 year term. This information is outlined in Appendix B.

For example, over a ten (10) year term, the cost per frontage foot each year (rate) is detailed below for the various sound attenuation options:

| | |
|---|---|
| Option 1 - 1.8 m ( 6.0 feet) residential Barkman fence | $ 6.26/foot/year |
| Option 2 - 2.05 m ( 6.7 feet) commercial/sound barrier Barkman fence | $10.95/foot/year |
| Option 3 - 3.5 m (11.5 feet) commercial/sound barrier Barkman fence | $14.54/foot/year |
| Option 4 - 3.5 m (11.5 feet) built in-place concrete (Windsor Park) | $44.10/foot/year |

Options 1 and 2 are predicted to provide only 3.0 dBA noise attenuation while Options 3 and 4 are predicted to provide 6.5 dBA attenuation.

**Report of the Committee on Works and Operations dated June 4, 1996**

This information may be used by the abutting property owners to determine which option and cost is affordable to the majority. It will also allow the property owners to decide if they want to pay for a noise attenuation barrier as a local improvement over the next ten (10) years on their taxes.

A detailed review of the existing City of Winnipeg Act and the Local Improvement By-Law has revealed that there is no specific mention of providing noise attenuation as a local improvement and proceeding under the definition or interpretation of "work" meaning a work or service which may be undertaken as a local improvement in pursuance of the Act could be inadequate authority.

The City of Winnipeg Act does not include noise attenuation barriers in Definitions - Section 342(1) or in Description of Local Improvements - Section 343(1). The Provincial Government will have to enact the necessary amendments to Sections 342(1) and 343(1) The City of Winnipeg Act to permit the City to construct noise attenuation barriers as a local improvement.

The City of Winnipeg By-law No. 98/72, a By-law to provide for the regulation of local improvements does not have any reference to noise attenuation barriers in Section 2 Interpretation. Thus, there must also be included a specific section titled Noise Attenuation Barriers to define how the special assessment (local improvement) to be levied is imposed upon the land served. Consequently, it is necessary for Council to pass amendments to the Local Improvement By-law to provide for the installation of noise attenuation barriers as shown in Appendix A.

The Local Improvements and Miscellaneous Revenue Branch considered noise attenuation as an area improvement and offered the opinion that, "It does not seem likely that the only benefitting properties are those which directly abut upon the improvement. Is levying only the fronting properties a fair mode of equating benefit with the levy?" In the case of noise attenuation it can be argued that most of the benefit is derived in the rear yard of the abutting property, the measurable benefit to the front and/or rear yards of the properties across the street would likely be minimal because of the increase separation distance from the noise source. It is noted that the most economical and effective method of noise attenuation is increased separation distance from the noise source. Thus the local improvement levy should be imposed only upon those properties which directly abut upon the improvement because it is believed that a local improvement project has never been assessed under the authority of Section 360 of The City of Winnipeg Act.

In any event, a detailed review has been made of the existing Section 360 of the Act which provides for the assessment for local improvements to be made against non-abutting land. The contents of Section 360 are reproduced in Appendix C, along with other relevant parts of The City of Winnipeg Act. In summary, it is permissible to assess the cost of an improvement against land that is not fronting on the work to be done. The process would require, in accordance with Section 370(4), that a hearing be held to receive public input prior to the passing of a by-law to make an assessment of the cost of the work. The project would be subject to advertisement and petitioning against by property owners impacted.

While the existing City of Winnipeg Act gives the City the legislative authority to implement an area assessment, the City's Local Improvement By-law, which defines procedural processes, does not provide for construction of noise attenuation barriers. It would therefore be necessary that Council pass an amendment to the Local Improvement By-law in order to implement this particular local improvement. It would also be necessary to put in place administrative procedures to give guidance as to defining the property to be assessed for the improvement.

In consideration of the fact that there would be minimal measurable benefit to properties other than those which directly abut the improvement, it is recommended that for a noise attenuation barrier as a local improvement the levy be imposed only upon those properties directly abutting the improvement as is the current practise for all local improvements constructed by the City in accordance with By-law No. 98/72.

Inasmuch as funding for local improvements is very limited in 1996, it may not be feasible to proceed with the installation of a noise attenuation fence as a local improvement before the 1997 Capital Estimates are approved, and therefore, provide adequate time to implement the required amendments to The City of Winnipeg Act and Local Improvement By-Law.

Should property owners wish to proceed with the noise attenuation barrier, they can be provided with a "Petition For" the desired option of noise attenuation fence rather than waiting for the twice yearly advertising of local improvements. This alternative would permit the work to be proceeded with upon approval of the enabling amendments and provision of sufficient local improvement funding.

**Report of the Committee on Works and Operations dated June 4, 1996**

The Committee on Works and Operations therefore recommends:

I. That the City of Winnipeg request the Provincial Government to enact the necessary amendments to The City of Winnipeg Act as shown in Appendix A to designate to the City the authority to install noise attenuation barriers as local improvements.

II. That the City Solicitor/Manager of Legal Services be requested to prepare the necessary amending by-law to the Local Improvement By-law No. 98/72 as shown in Appendix A to provide for the installation of noise attenuation barriers as a local improvement.

III. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Copy of attachments referred to in the above clause are on file in the office of the City Clerk.

Adopted by consent.

(See Minute No. 841 for Attachment A)

**Access to a Proposed Commercial Development Located at 1290 Main Street File SC-1 (Vol. 41)**

**804** - 10. The Committee on Works and Operations has been advised that an application for a non-conforming private approach to provide access to a proposed commercial development located at 1290 Main Street has been received from Mr. Louis Rosenberg.

The Administration advises that the subject application is non-conforming under The City of Winnipeg Private Approaches By-Law No. 6546/95 Section 3, Subsection (4), which states as follows:

*(4) No approach shall be constructed, erected or installed on any of the streets or portions of streets set forth in Schedule 2 hereto, except where two separate directional approaches, one for access to, and one for egress from the property , may be constructed where the property to be served has sufficient frontage to permit such approaches to be located in such a manner as to comply with all respects with the provisions of Section 8 of this by-law.*

This section of Main Street contains two 13.1 metre roadways separated by a 3.0 metre median and carries approximately 30,400 vehicles in a typical 12 hour weekday period between 07:00 and 19:00.

The land bounded by Main Street to the east, Charles Street to the west, Anderson Avenue to the south and Church Avenue to the north is currently vacant. However, there is a proposed commercial development for the south-east corner of this land which would contain a Wendy's Restaurant, with a drive-through facility. Future plans include a Blockbuster Video and a strip mall.

Currently there exists two private approaches on the north side of Anderson Avenue and three private approaches on the south side of Church Avenue which served a previous development on this now vacant site.

The applicant proposes to remove the two existing private approaches on the north side of Anderson Avenue and construct a 7.5 metre private approach. It is also proposed that two existing private approaches be removed and one existing approach be modified on the south side of Church Avenue. In addition, a proposed 7.5 metre wide private approach will be constructed on the east side of Charles Street.

The applicant has also applied to construct a non-conforming bi-directional private approach on the west side of Main Street approximately 48.6 metres north of Anderson Avenue. This bi-directional private approach is non-conforming under the City of Winnipeg Private Approaches By-Law, which requires angular entrance only and angular exit only private approaches to serve all commercial properties on Main Street.

To maintain maximum capacity of traffic on arterial streets, and to reduce the frequency of rear-end collisions, The Institute of Transportation Engineers Traffic Engineering Handbook states that on all arterial streets, private approaches should be designed to function as uni-directional, and located as far away from each other as possible.

**Report of the Committee on Works and Operations dated June 4, 1996**

Studies have indicated that there is a direct connection between the number of rear-end collisions and the number of right turns that are allowed from arterial streets; hence, rear-end collisions occur more frequently where increased right turns are allowed. It has been found that each commercial private approach adds between 0.1 and 0.5 accidents per year along the street.

The Streets and Transportation Department have advised that they anticipate the following traffic operating problems if the proposed bi-directional private approach was constructed:

1) exiting vehicles from the north area of the parking lot within the site will queue and obstruct vehicles wishing to enter the site from Main Street (Figure A);

2) it is difficult for vehicles to enter the site and make a U-turn to proceed to the north area of the parking lot within the site (Figure B);

3) it is difficult for a vehicle to exit the drive-through onto Main Street and leave enough room within the private approach for a vehicle to enter the site (Figure C);

4) a service vehicle (SU-9) cannot enter the site from the curb lane of Main Street.

It is for the above reasons that the Streets and Transportation Department recommends only angular, uni-directional private approaches to be constructed on this section of Main Street. The applicant can easily provide conforming angular private approaches on the west side of Main Street (as indicated on Figure D, designated as Appendix A) to serve the property without either the loss of parking spaces, or modifying the existing site plan, as the private approaches could line-up with the parking isles.

All dimensions on Figure D (Appendix A) are the minimums for illustration purposes, and therefore the location of the proposed private approaches can be altered to within the confines of these minimum dimensions and still be considered to be conforming private approaches.

The Committee on Works and Operations recommends the following and submits draft by-law to amend Schedule 2 of the Private Approaches By-law No. 6546/95 accordingly, namely:

I. That the application for the construction of one 8.5 metre concrete approach on the west side of Main Street approximately 48.6 metres north of Anderson Avenue as shown on Drawing No. A-8783, designated as Appendix B, be approved.

II. That Schedule 2 to the Private Approaches By-law No. 6546/95 be amended to exempt the west side of Main Street approximately 48.6 metres north of Anderson Avenue.

III. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

Copy of attachments referred to in the above clause are on file in the office of the City Clerk.

Adopted by consent.

**Additional Appropriation - Thin Bituminous Overlays**
**Files FE-1 (Vol. 28) and SC-3.5 (Vol. 1)**

**805 -** 11. On May 15, 1996, Executive Policy Committee referred back to the Committee on Works and Operations Clause 10 of its report dated May 7, 1996, which clause recommended that an additional appropriation in the amount of $1,000,000.00 for Thin Bituminous Overlays be approved, in view of the fact that the City of Winnipeg has requested the Province of Manitoba to participate in a street renewal program, and to provide the Committee on Works and Operations the opportunity to review with the Administration, other alternatives such as partial Thin Bituminous Overlays in the 1996 budget, and develop a plan and program in conjunction with the 1997 budget.

**Report of the Committee on Works and Operations dated June 4, 1996**

In view of the fact that Council, at its reconvened meeting held on May 23, 1996, passed a resolution approving an additional appropriation in the amount of $1,000,000.00 for Thin Bituminous Overlays, the Committee on Works and Operations at its meeting held on June 4, 1996 directed that the matter be filed.

Adopted by consent.

## COMMITTEE ON WORKS AND OPERATIONS

## CONSIDERATION OF BY-LAWS

Moved by Councillor Murray,

**806** - That consideration of By-law No. 6847/96, a By-law of The City of Winnipeg to repeal By-law No. 6517/94, being a By-law of The City of Winnipeg to close part of the North/South lane north of Sara Avenue and to open the East/West lane to Furby Street, be laid over until the next regular meeting of Council, to be held on Wednesday, July 24, 1996.

Carried.

On motion of Councillor Clement, the rule was suspended and By-law No. 6855/96, a By-law of The City of Winnipeg to amend By-law No. 6546/95, being a by-law of the said City to regulate the construction, maintenance and removal of private approaches and private walks, was read a first, second and third time, the rule being suspended for the third reading, and was passed and ordered to be signed and sealed.
File SC-1 (Vol. 41)

## COMMITTEE ON WORKS AND OPERATIONS

## QUESTION PERIOD

**807** - Councillor Vandal noted that his constituents were upset about the condition of their residential streets and questioned the status of residential street renewal. Councillor Vandal also inquired about the Province's intent to match the City's $4 - 5 million contribution and asked when alternative strategies would be considered.

Councillor Clement advised that some of the worst streets would have work done in the short term due to the thin bituminous overlay money approved in the last budget. He noted that removal of some road restrictions, on June 3, and the success of vacancy management in employing 84 people off the temporary list have enabled a program which included, in some cases, residential street curb work, mud jacking and pot hole fixing. He added that each of the Streets Supervisors in the respective Wards had lists of streets that would receive attention.

Councillor Clement referred to attempts to include the $5 million package with the overall infrastructure package and advised of recent discussions with Don Leitch, Clerk of the Executive Council, Province of Manitoba, regarding the Brookside Cemetery aspect of the infrastructure package. Councillor Clement suggested that if the Province does not provide some kind of resolve then the City should explore the possibility of using their $5 million portion for short term work.

Councillor Vandal questioned the justification of approving an additional $400,000.00 from 1996 Capital Funds on reconstruction of Nairn Avenue when residential street renewal funds was not available.

Councillor Clement responded that the amount was actually $550,000.00 and was specifically for the Nairn Avenue Infrastructure project.

**Committee on Works and Operations - Question Period (continued)**

Councillor Golden referred to a recent report on CBC television and inquired if the surcharging of drain pipes into the rivers caused an 8% or 50% decrease in sewer system efficiency and suggested that Councillor Clement identify which City employee provided the information.

Councillor Clement agreed to report back to Councillor Golden with the information.

Councillor Steek advised that information was received at a recent informal meeting with the Minister of Urban Affairs and that the status of the Province's $5 million contribution would be available to the City within the next two weeks.

Councillor Prystanski questioned when the Director of Water and Waste position would be filled.

Councillor Clement noted that the Commissioner was in the process of assembling a group to tentatively begin the procedure at the end of the month.

Councillor Murray requested that Council be provided with a statistical breakdown of head on collisions and other accidents involving automobiles, trucks and pedestrians on centre two way left turn lanes in Winnipeg. Councillor Murray also requested that the national studies on regional street design and the Canadian safety standards recommended by professional associations be provided to Council.

Councillor Clement advised that the requested information would be provided by Mr. Thomson, Director of Streets and Transportation.

Councillor Murray questioned why the Executive Policy Committee wasn't taking some of the infrastructure monies out of the capital budget and placing a greater priority on residential street renewal. Councillor Murray noted that approximately $45 million was allocated for new street infrastructure in the next few years and questioned if Councillor Clement was prepared to bring forward a report.

Councillor Clement stated that the situation would be reviewed and noted that the Capital Budget had been significantly reworked with $5 million of the $61 million allocated for residential street upgrades this year. He further advised that the Board of Commissioners would be reporting on project priority.

Councillor Murray requested a statistical listing of the funds spent in the last five years by the City and the Province of Manitoba on residential street renewal in Winnipeg and further requested a comparison with 10 large urban centres in the country.

Councillor Clement acknowledged the question and agreed to report back to Councillor Murray.

The Deputy Speaker called Deputy Mayor Eadie to the Chair in order to participate in the debate.