

# ANNUAL REPORT OF THE ENGINEERING AND PUBLIC WORKS DEPARTMENT

## 1969



I N D E XP A G E

Letter of Transmittal .....	1
Total Yearly Expenditure .....	5
Administration of Justice .....	73
Arctic Rink Site Parking Lot .....	76
Brunswick Street Parking Lot .....	75 - 76
Capital Account Curb and Gutter .....	24 - 25
Capital Account Domestic Sewer .....	29 - 33
Capital Account Forest Hill Access Road .....	48
Capital Account Gravel Roads .....	46 - 48
Capital Account Industrial Development - A.D.B. ....	48
Capital Account Industrial Development - Wilsey Road ...	51
Capital Account Maintenance Depot .....	49 - 50
Capital Account Odell Park Development .....	50
Capital Account Paving .....	25 - 28
Capital Account Surface Sewer .....	34 - 37
Capital Account Water .....	38 - 45
High Level Reservoir .....	41 - 42
Intermediate Level Reservoir .....	42 - 43
Development of Well #5 .....	43 - 44
Cost of Water Supply to date (south side of St. John River) .....	45
Carleton Park .....	61
Cement Walks .....	68
City Hall .....	64
City Yard .....	62
Clark, J. T. Memorial Building .....	73
Contingents .....	73
Development of Park Areas .....	62 - 63
Domestic Sewer .....	65 - 66
Fire Department .....	67
Industrial Development .....	75
Local Improvement .....	52 - 53
Loyalist Cemetery .....	72
Municipal Parking Lot .....	74
Odell Park .....	59 - 61
Old Burial Ground .....	67
Public Works .....	54 - 59
Recreation .....	63 - 64
Repairs to Concrete Sidewalks.....	69
Roads and Streets .....	6 - 23
Sanitation .....	69 - 72
Garbage Collection .....	69
Sanitary Land Fill .....	69 - 70
Street Cleaning .....	70 - 72
Sign Department .....	64
Street Lights .....	77 - 80
Surface Sewer .....	65
Tourist and Industry .....	74 - 75
Water .....	81 - 91
Water Ordinary .....	81 - 83
Hydrants .....	83
Meters .....	83 - 85
Distribution System .....	84
Administration Salaries and Office Equipment ...	86
Hydrant Revenue .....	87
Water Pumping Station .....	87 - 91
Wilmet Park .....	62
York Arena .....	75
Report of E. W. Hagerman, City Analyst .....	92 - 96

TO HIS WORSHIP THE MAYOR AND COUNCILLORS  
OF THE CITY OF FREDERICTON.

Gentlemen:

I submit herewith this report which is a statement of the work done in the various City Departments under the direct supervision of the City Engineer.

This report covers the period January 1, 1969 to December 31, 1969 and is written for the purpose of maintaining an accurate record on file of the activities and costs of the various departments.

During the year, along with regular maintenance, City crews and contractors constructed the following work:-

Concrete Curb and Gutter .....	3.68 miles
Concrete Sidewalks .....	2.21 miles
Grading and Gravelling City Streets .....	2.97 miles
New Street Construction .....	1.80 miles
New Pavement 3/4" Dense Mix (Forbes and Sloat Ltd.).....	1.11 miles
Recap (1/2" Minus) .....	.36 miles
Sealing City Streets (1/4" Hot Mix) .....	5.03 miles
Chip Seal (3/4" - 1/2" - 3/8" Chips) (Flintkote Co. of Canada Ltd.) .....	1.31 miles
8" - 10" - 12" - 18" Domestic Sewer .....	2.75 miles
10" - 12" - 15" - 18" - 24" - 36" Surface Sewer .....	2.57 miles
4" - 6" - 8" - 10" - 12" C. I. Water Pipe .....	2.64 miles
6" Force Main .....	.24 miles

Contractors under contract with the Public Works Department of the City of Fredericton in 1969 constructed or began construction on the following projects:-

- |                                |  |
|--------------------------------|--|
| Ashfield Construction Co. Ltd. | - To installing Domestic Sewer<br>and Water on Wilsey Road                       |
| Bemrose and Kilburn            | - To installing Domestic Sewer,<br>Surface Sewer and Water on Wright<br>Street   |
| Bemrose and Kilburn            | - To installing Domestic Sewer,<br>Surface Sewer and Water on Ayres<br>Street    |
| Bemrose and Kilburn            | - To installing Domestic Sewer,<br>Surface Sewer and Water on<br>Dufferin Street |
| Canada Gunite Co. Ltd.         | - Design and construction of a<br>Prestressed Reservoir, Regent<br>Street        |

- International Water Supply Ltd. - Completion of 1968 contract; namely development of Well #5, Woodstock Road, Overhaul Pump #2 Wilmot Park and installing same in Pump House #5
- Fredericton Housing Ltd. - Completion of 1968 contract, construction of a Pump House to house the Pumping Equipment for Well #5, Woodstock Road
- Fredericton Housing Ltd. - To installing Domestic Sewer, Surface Sewer and Water - Colonial Heights
- Fredericton Housing Ltd. - To installing Domestic Sewer, Surface Sewer, Water on Rankine Street, Chippin Court and Tims Court.
- Maritime Engineering Ltd. - To construction of a City Maintenance Depot, Regent Street
- Maplewood Contracting Ltd. - To installing Domestic Sewer, Surface Sewer and Water on Prospect Street, Smythe Street to Regent Street

In addition tenders were received and accepted from the following contractors:-

- Forbes and Sloat Ltd. - supply and delivery of crushed gravel
- W. W. Thomas - to supplying and delivering winter sand to City Yard
- W. W. Thomas - to supplying sand for excavation of Domestic Sewer, Surface Sewer and Water
- Bemrose and Kilburn - to supplying sand for excavation of Domestic Sewer, Surface Sewer and Water
- W. W. Thomas - to supplying Topsoil
- Harry Smith - to supplying Topsoil
- Flintree Concrete Ltd. - to supplying and delivering ready-mixed concrete

The current expenditures for the twelve-month period, January 1, 1969 to December 31, 1969, appear as follows:-

	<u>Appropriation</u>	<u>Net Expenditure</u>	<u>Debit</u>	<u>Credit</u>
Street Lights	\$ 82,305.00	72,591.54		9,713.46
Public Works	47,400.00	56,948.25	9,548.25	
Roads and Streets	290,100.00	252,881.24		37,218.76
Garbage Collection	63,993.00	64,032.74	39.74	
Garbage Disposal	16,785.00	16,827.63	42.63	
Wilmot Park	4,940.00	7,925.67	2,985.67	
Odell Park	12,875.00	16,836.49	3,961.49	
Carleton Park	5,250.00	6,201.42	951.42	
Old Burial Ground	2,600.00	3,346.35	746.35	
Loyalist Burial Ground	76.00	74.39		1.61
Clearing Parks	5,100.00	10,941.00	5,841.00	
Street Cleaning	58,500.00	76,507.10	18,007.10	
City Yard	12,750.00	11,414.96		1,335.04
Street Signs	2,500.00	4,661.98	2,161.98	
Sidewalks	4,000.00	12,404.24	8,404.24	
Storm Sewers	13,000.00	21,882.53	8,882.53	
<b>TOTALS</b>	<b>\$ 622,174.00</b>	<b>635,477.53</b>	<b>61,572.40</b>	<b>48,268.87</b>

	<u>Revenue</u>	<u>Net Expenditure</u>	<u>Credit</u>
Water Pumping Station)		69,830.20	
Sewerage Domestic )	\$147,449.86	22,097.60	
Water Ordinary )	392,334.86	180,684.85	
Revenue - Private Hydrants	6,360.00		
Revenue - Sprinklers	8,640.00		
Revenue - City owned Hydrants	56,400.00		
Water - Office Administration		32,147.58	
Salaries		28,765.66	
Principal and Interest		211,494.63	
<b>TOTALS</b>	<b>\$611,184.72</b>	<b>\$ 545,020.52</b>	<b>\$ 66,164.20</b>

The City of Fredericton occupies a total of some 23.5 square miles. This area includes the water area occupied by the Saint John River within the boundaries of the City.

The 1966 final census shows that the City's population was 22,460.

Following in the body of this report is a detailed statement of the work done, comparative expenditures and unit costs under the various departments. The detailed report of any particular department may be found by referring to the index.

Respectfully submitted,

*W. L. Barrett*  
CITY ENGINEER.

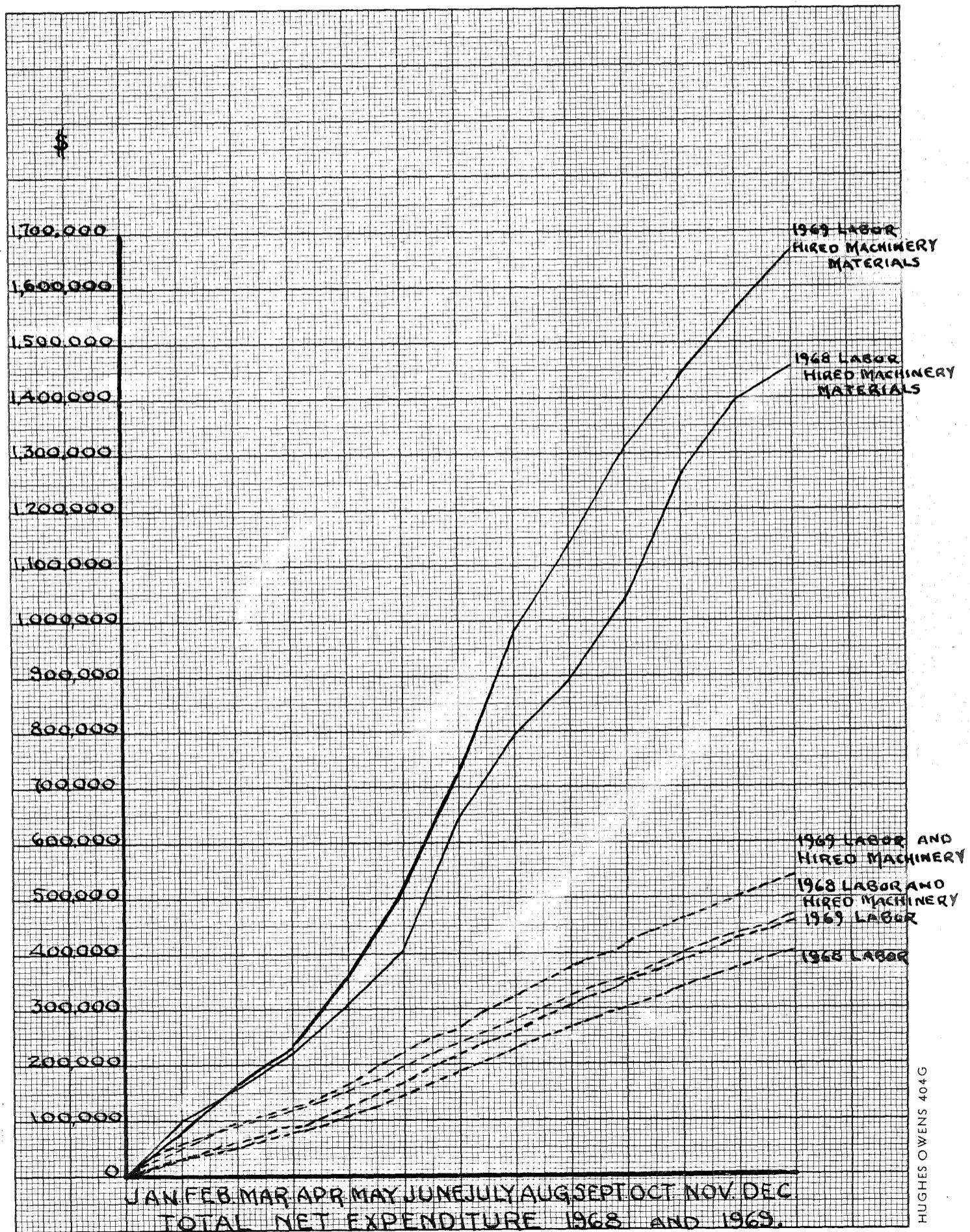
### TOTAL YEARLY EXPENDITURE

The total yearly net expenditure under the direct supervision of the City Engineer in 1969 amounted to \$1,655,454.12.

A graphic comparison of expenditures for labor, labor and hired machinery and labor, hired machinery and materials for the year 1968 and the year 1969 are shown on the following graph.

The location of new construction completed and commenced in 1969 is shown on maps inserted after page 5 of this report.

Following the maps is a graph showing the distribution of the City of Fredericton Tax Dollar in 1969.



## DISTRIBUTION OF THE 1969 CITY DOLLAR

PROTECTION (FIRE-POLICE - STREET LIGHTS)

DEBT CHARGES

PUBLIC WORKS

RECREATION AND COMMUNITY SERVICE

GENERAL GOVERNMENT

SANITATION AND WASTE REMOVAL

MISCELLANEOUS CONTINGENT



## ROADS AND STREETS

In 1969 the appropriation for Roads and Streets was \$290,100.00.

There are in Fredericton 74.92 miles of Roads and Streets; 12.37 miles being located on the north side of the Saint John River and 62.55 miles on the south side. In addition there are 58.81 miles of concrete and asphalt sidewalks; 9.51 miles on the north side of the Saint John River and 49.30 miles on the south side of the Saint John River.

<u>Roads and Streets</u>			
	<u>Urban</u>	<u>Rural</u>	<u>Total (Miles)</u>
Paved	57.41	5.31	62.72
Gravel	3.83	6.27	10.10
Chip Seal	1.69	.41	2.10
TOTALS =	62.93	11.99	74.92

### Roads and Streets Expenditure - 1969

Gross Expenditure .....	\$ 375,554.86
Credits .....	122,673.62
Net Expenditure .....	\$ 252,881.24
1969 Appropriation .....	290,100.00
CREDIT .....	\$ 37,218.76

The above credits amounting to \$122,673.62 are made up as follows:

Forest Hill Cemetery (Digging graves) .....	\$ 154.21
Civic Union Public Employees (re Convention) .....	71.04
Crane Supplies Ltd. (Rebate on invoice, sale charges)	1.51
Provincial Motor Sales (returned 20 oil filters) ....	53.42
DeSourdy Construction Company (grading and graveling and patching Lincoln Road) .....	134.95
H. S. Gill (sale of lumber) .....	64.48
Woodlot Services Ltd. (sale of pulp) .....	83.07
Sobeys Ltd. (grading Parking Lot) .....	65.88
Canadian National Railway (grading) .....	55.78
New Brunswick Electric Power Commission (grading) ...	27.57
Imperial Oil Co. Ltd. (return on drums) .....	700.00
Diamond Construction Co. (sale of 45 Gallons RS <sub>2</sub> ) ...	17.52
Government of Canada (Department of Agriculture- patching) .....	467.62
Royal Canadian Mounted Police (patching) .....	22.14
Brunswick Construction Co. (patching) .....	82.99
Mr. Maxon (damage to lawn).....	5.00
Mr. McMinniman (damage to lawn) .....	10.00
Fredericton Curling Club (cutting concrete floor)....	12.25
Repairs to Curbs for various Private Parties .....	150.00
Forward .....	\$ 2,179.43

	Carried Forward	\$ 2,179.43
Workmen's Compensation .....	834.93	
S. Thomas (sale of batteries) .....	45.00	
Abe Levine (Sale of scrap iron) .....	105.12	
N. B. Telephone Co. (payment on long distance calls - R. Dorcas).....	7.83	
Province of N. B. (refund on Gas Pump License) .....	5.00	
G. Bezanson (sale of axle) .....	10.00	
W. Chase (re truck damage) .....	5.00	
2% discount on J. S. Neill & Sons bills .....	1.14	
Journal Voucher (parts for Ford Oil Truck charged in error) .....	21.90	
Journal Voucher (Gas, Oil, Varsol, Anti-freeze, Diesel Fuel) .....	5,561.76	
Journal Voucher (Repairs to curb at #5 Well) .....	25.00	
Journal Voucher (City pension) .....	8,516.17	
Journal Voucher (Canada Pension) .....	4,990.10	
Journal Voucher (Materials sold to private parties- sand and salt) .....	682.58	
Journal Voucher (materials sold to other City Departments; surface seal, sand, salt, rock dust, kerosine, cement pipe, cedar posts, etc.) .....	6,534.66	
Journal Voucher (machinery rental on other accounts)	93,148.00	
TOTAL .....	\$ 122,673.62	

The Gross Expenditure is divided as follows:-

Labor - the total of Roads and Streets Payrolls.....	\$ 118,774.58
Hired Trucks and Machinery .....	47,318.75
Material Charges - which includes Workmen's Compensation, Unemployment Insurance and all materials including purchase and repairs to City owned equipment ..	<u>209,461.53</u>
TOTAL .....	\$ 375,554.86

The Gross Expenditure of \$375,554.86 is divided into the following items. These items give an account of the amount and kind of work done by the Roads and Streets Department during the year.

#### ITEM #1

##### Sanding Streets and Walks:-

Storing sand in Winter Storage Pile and spreading same on slippery Streets and Walks.

Labor .....	\$ 15,846.25
Hired Trucks and Machinery	3,073.00
City Machinery charges ...	4,473.50
Materials .....	<u>19,120.49</u>
Total Expenditure ...	\$ 42,513.24

5,054 cubic yards of sand was purchased during the winter of 1969. The sand was supplied by W. W. Thomas at a price of \$1.20 per cubic yard, delivered to the City Stock Pile.

In 1969, 568.3 tons of salt was used for ice control. The cost and distribution charges are included under the above heading. The City purchased 600 tons of salt in 1969. In stock as of December 31, 1969 there were 800 bags (40 tons) of salt.

One Portable Conveyor was purchased in 1969 from Horsnell's Ltd. at a cost of \$1,038.80 and charged to this account.

#### ITEM #2

Snowplowing Sidewalks:- ..... 58.81 miles

58.81 miles of sidewalks were plowed during the winter months in 1969.

Total expenditure under this heading amounted to \$8,166.84, and was made up as follows:-

Labor .....	\$ 3,354.84
Hired Machinery .....	2,720.50
City Machinery charges..	<u>2,091.50</u>
TOTAL .....	\$ 8,166.84

In 1969 the unit cost of plowing and sanding one mile of sidewalk was approximately \$239.00 and was calculated as follows:-

Labor .....	\$ 6,524.09
Hired Trucks and	
Machinery .....	3,335.10
City Machinery charges :	2,986.20
Material (sand) .....	<u>1,212.96</u>
TOTAL .....	\$ 14,058.35 - - - - (1)

The overall cost, including Compensation, Pension Fund and Sick Leave was approximately \$259.00 per mile.

#### ITEM #3

Snow Control (Streets):-

Blowing, shovelling and hauling snow, plowing or scraping roads, cleaning gutters, thawing catch basins of ice and snow and any other means of snow control.

The total cost of snow control (streets) amounted to \$104,420.86 and was made up as follows:-

Labor .....	\$ 30,777.40
Hired Trucks and Machinery .....	38,292.75
City Machinery Charges (Jeeps, Bulldozers, Graders, etc.) .....	30,142.00
Expendable Materials (Grader Blades, Chains, etc.) .....	3,149.86
Maintenance of Snow Control Equipment (repairs to <del>Operating Costs</del> Blowers, etc.) .....	1,550.42
Miscellaneous Materials (Shovels, picks, lumber, etc.) .....	<u>508.43</u>
TOTAL .....	<u>\$ 104,420.86</u>

The following table shows comparative labor (including hired trucks and machinery) costs of Snow Control for the years 1967 to 1969 inclusive:-

	<u>1967</u>	<u>1968</u>	<u>1969</u>
Snowplowing Roads and Streets ..	\$ 28,945.09	23,848.90	32,366.41
Blowing, hauling and shovelling snow .....	106,059.39	53,092.80	30,988.56
Catch Basins .....	5,472.71	6,643.45	4,230.39
Snow Fences .....	910.81	882.72	806.63
Plowing Parking Lots .....	<u>602.38</u>	<u>450.62</u>	<u>678.16</u>
TOTAL .....	<u>\$ 141,990.38</u>	<u>84,918.49</u>	<u>69,070.15</u>

74.92 miles of Roads and Streets were plowed and maintained during the winter months.

The unit cost per mile of plowing, salting and sanding City Roads and Streets was approximately \$1,882.00 and was calculated as follows:-

Labor (Plowing and Sanding) .....	\$ 43,454.40
Hired Trucks and Machinery .....	40,751.15
Machinery charges (Graders, Jeeps, Bulldozer, etc.) .....	33,720.80
Materials (Sand and Salt) .....	17,907.53
Repairs to Snow Blowers and Boilers .....	1,550.42
Expendable materials (Grader Blades, chains, etc.) .....	3,149.86
Miscellaneous Materials (Lumber, Fencing, Wire, Shovels, etc.) .....	<u>508.43</u>
TOTAL .....	<u>\$ 141,042.59</u>

-- (2)

The overall cost, including Workmen's Compensation, Pension Fund and Sick Leave was approximately \$1,987.00 per mile.

TOTAL COST OF SNOW CONTROL - Add (1) and (2) ..... \$ 155,100.94

NET COST OF SNOW CONTROL (Less City Machinery  
Charges - \$36,707.00) ..... \$ 118,393.94

Snow Fall in Fredericton for the last five years was as follows:-

January 1, 1965 to December 31, 1965 .....	85.50	in.	
January 1, 1966 to December 31, 1966 .....	63.80	in.	
January 1, 1967 to December 31, 1967 .....	152.9	185.20	in.
January 1, 1968 to December 31, 1968 .....	86.80	in.	
January 1, 1969 to December 31, 1969 .....	77.00	in.	

Snow Fences:-

Twelve thousand feet of lath and wire snow fencing was erected under Snow Control to prevent drifting snow from building up on Outlying Roads. No new fencing was purchased in 1969.

ITEM #4

Streets:-

General work of maintenance of Roads and Streets and any other items such as building culverts, curbs and gutters or pavement which are not mentioned under some particular heading.

Total expenditure under Streets Account (Labor, Machinery and Materials) amounted to \$80,732.42 and was made up as follows:-

Item	Labor Hired Trucks & Machinery	City Machinery Charges	Materials	Total
Repairing Machinery	\$ 16,112.54	1,294.00	32,460.53	49,867.07
Maintaining Driveways	582.54	346.50	Cr. 12.25	916.79
Culverts	404.24	157.00	147.79	709.03
Ditching	13.56	-----	-----	13.56
Erection of Guard Posts	141.21	-----	560.85	702.06
Repairing Curbs and Gutters	1,207.70	371.00	555.89	2,134.59
Sodding & Seeding	1,820.76	364.00	366.30	2,551.06
Rip-Rapping	224.43	20.00	-----	244.43
Cutting Grass	4,020.21	628.50	395.84	5,044.55
Weather Account and Holidays	18,549.28	-----	-----	18,549.28
TOTALS	= \$ 43,076.47	3,181.00	34,474.95	80,732.42

ITEM #5

Surface Sewers:-

This item in 1969 was taken out of Roads and Streets Account and made a separate account. The account for this item will appear on page 65 of this report.

ITEM #6

Grading and Gravelling:-

Grading and application of Gravel on City Roads and Streets.

Labor .....	\$ 1,088.04
Hired Trucks and Machinery	41.00
City Machinery Charges...	2,199.00
Materials (Crushed Rock, Class A Gravel) .....	<u>8,041.89</u>
TOTAL .....	\$ 11,369.93

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2,105.85 tons of Class "A" crushed gravel and 1,633.2 tons of crushed rock was used in the maintenance and repairs to Gravel Roads under "Roads and Streets".

The gravel was purchased from Forbes and Sloat Limited at a contract price of \$1.65 per ton for Class "A" ( $1\frac{1}{4}$ ") crushed rock and the gravel rock was purchased from Diamond Construction Company at a cost of \$2.50 per ton.

A stock pile is placed at the site of the Old City Dump on the Industrial Road for spring frost boils and excavation repairs.

ITEM #7

Lincoln Road:-

All work done on the Lincoln Road, other than work done by the Motor Graders.

The current expenditure incurred on this Road was as follows:-

Labor .....	\$ 406.65
Hired Trucks .....	183.50
City Machinery charges...	<u>264.00</u>
	854.15
Less Credit (DeSourdy Construction Co.) .....	<u>112.51</u>
TOTAL .....	\$ 741.64

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ITEM #8

Wilsey Road:-

All work done on the Wilsey Road, other than work done by the Motor Graders.

Labor .....	\$ 393.09
Hired Trucks and Machinery.	61.00
City Machinery charges ....	534.00
Materials (gravel, concrete pipe, cement) .....	<u>473.75</u>
TOTAL .....	\$ 1,461.84

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For the above expenditure portions of the Road were gravelled to correct frost conditions and 60' - 15" Concrete Pipe and 24' of 12" concrete pipe was installed on the Road.

ITEM #9

Doak and Flanagan Roads:-

All work done on the above mentioned Roads, other than work done by the Motor Graders.

Labor .....	\$ 470.87
Hired Trucks .....	94.00
City Machinery charges ....	<u>458.50</u>
TOTAL .....	\$ 1,023.37

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ITEM #10

Maryland Road:-

Under this heading the expenditure amounted to \$867.93 and was made up as follows:-

Labor .....	\$ 833.93
City Machinery charge ....	<u>34.00</u>
TOTAL .....	\$ 867.93

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ITEM #11

Rural Roads:-

Under this heading a portion of the Corbett Road from existing pavement on Forest Hill Road to north property line of C.B.Z. property was cleared and widened. Also included are survey charges to Trainor Surveys Limited for surveying the above portion of this Road.

The expenditure amounting to \$506.94 was made up as follows:-

Labor .....	\$ 87.32
City Machinery charge .....	230.00
Materials .....	<u>189.62</u>
TOTAL .....	\$ 506.94

Tower Road was gravelled and chip sealed a distance of 800 feet and charged to "Roads and Streets" under the heading "Chip Seal".

ITEM #12

Resurfacing Asphaltic Concrete Repairs  
and Paving Entrances:-

Patching and repairing pavement, applying seal coat, light tar or asphalt to pavement and applying asphalt to driveways.

Labor .....	\$ 18,585.57
Hired Trucks and Machinery.	68.00
City Machinery charges ....	5,816.00
Materials .....	<u>16,750.07</u>
TOTAL .....	\$ 41,219.64

In 1958 a large Aggregate Dryer and Aggregate Conveyor Belt was purchased to facilitate the mixing of patching material in the City Yard. This equipment has resulted in an improvement to the quality of the patching material produced at the Yard and has also accelerated the operation.

When local contractors have plants set up, patching material can be obtained more economically. Patching material when available was obtained from Forbes and Sloat Limited and W. J. Gorman.

The total expenditure for Pavement Repairs and Driveways for 1969 under the above heading, including Workmen's Compensation, Pension Fund, Holidays and Sick Leave amounted to \$46,094.03 and was computed as follows:-

Asphalt

Stock from 1968

2115 Gallons RC <sub>3</sub> .....	\$ 894.65
135 Gallons RS <sub>2</sub> .....	<u>51.71</u>
	\$ 946.36

Plus stock purchased in 1969

5850 Gallons RC <sub>3</sub> .....	\$ 1,590.00
3500 Gallons RS <sub>1</sub> and RS <sub>2</sub> .....	<u>1,398.87</u>
Total Stock .....	\$ 3,935.23

Less stock for 1970

1620 Gallons RC <sub>3</sub> .....	\$ 440.64
90 Gallons RS <sub>2</sub> .....	<u>36.00</u>
	\$ 476.64
	\$ 3,458.59

<u>Less Credit on Return of Drums</u> .....	<u>700.00</u>
NET COST OF LIQUID ASPHALT .....	\$ 2,758.59

Cost of Hot Mix Asphalt in Patching Streets  
and Driveways obtained from Perma Paving Asphalt  
Limited and W. J. Gorman .....\$ 10,063.33.

Total Hot Mix Asphalt Cost .....	\$ 10,063.33
Liquid Asphalt .....	2,758.59
Kerosine (1680.1 Gallons) .....	534.27
Crusher Dust (311.25 tons) .....	778.13
Sand (150 cubic yards) .....	180.00
Crushed Rock (140.40 tons) .....	498.90
New Brunswick Power Commission (Power) .....	458.88
Repairs to Plant .....	3,290.23
New Equipment (1 Heated Asphalt Roller) .....	405.00
Propane Gas .....	60.00
City Labor (City employees, including Pension Fund, Workmen's Compensation, Sick Leave and Holiday Account) .....	21,930.97
Hired Trucks and Machinery .....	68.00
City Machinery .....	5,816.00
Miscellaneous (Pickaxes, Water Cans, etc.) .....	<u>270.18</u>
Total Gross Expenditure .....	\$ 47,112.48

LESS CREDITS

Forest Hill Cemetery .....	\$ 126.05
Diamond Construction Co. Ltd. (45 Gallons RS <sub>2</sub> ) .....	17.52
Government of Canada (Research Station - patching) .....	467.62
R.C.M.P. (patching) .....	22.14
DeSourdy Const. Co. (patching) .....	22.44
Brunswick Const. Co. (patching) .....	82.99
Journal Voucher (sale of Crushed Rock and Crusher Dust to other City Departments) .....	<u>249.69</u>
TOTAL NET COST .....	\$ 46,094.03

Materials in stock, December 31, 1969:-

1620 Gallons RC <sub>3</sub> @ .272¢ per Gallon ...\$	440.60
90 Gallons RS <sub>2</sub> @ 40¢ per Gallon .....	36.00
100 tons Crusher Dust @ \$2.50 per ton..	250.00
60 tons Crushed Rock @ \$3.00 per ton ..	<u>180.00</u>
TOTAL .....	\$ 906.60

ITEM #13

City Motor Graders:-

Operators' Wages .....	\$ 812.13
Hired Grader .....	36.00
Machinery Charges .....	<u>1,884.00</u>
TOTAL .....	\$2,732.13

The repair costs for City Motor Graders will be found on page 22 of this Report, under the heading "Roads and Streets".

ITEM #14

Parking Lots:-

The above heading includes the following areas:- Old Arctic Rink site, city owned property situated on the north side of Campbell Street between Regent and Carleton Streets(Wharf), an area west of the Canadian Legion property on Queen Street and Sobeys Parking Lot on Brunswick Street.

The expenditure on these Parking Areas was as follows:-

Labor .....	\$ 773.95
Hired Trucks .....	356.00
City Machinery .....	<u>1,673.50</u>
	<u>2,803.45</u>
Less Credits (Private Parking Lots) .....	<u>115.63</u>
TOTAL .....	\$ 2,687.82

Late in 1969, Sobeys Parking Lot was acquired by the City of Fredericton and made a separate account under the heading "Brunswick Street Parking Lot" and the Arctic Rink Site was metered and made a separate account under the heading "Arctic Rink Parking Lot". These accounts will appear later in this Report.

ITEM #15

Clearing along Rights-of-Way:-

Expenditure ..... \$ 2,041.85

The above expenditure was for clearing rights-of-way along the Corbett, Doak, Flanagan and New Maryland Roads and was made up as follows:-

Labor .....	\$ 795.35
Hired Trucks and Machinery	725.50
City Machinery .....	<u>521.00</u>
TOTAL .....	<u>\$2,041.85</u>

ITEM #16

Chip Seal and Seal Coating:-

In 1969 Flintkote Company was awarded a contract to resurface the Dunn's Crossing Road and a portion of Tower Road.

The cost of this contract was made up as follows:-

RS <sub>1</sub> Emulsion, 13,029 Gallons @ 36¢ per Gallon .....	\$ 4,690.44
3/4" Stone supplied, 207.65 tons @ \$5.50 per ton .....	1,142.08
1/2" Stone supplied, 158.80 tons @ \$6.00 per ton .....	952.80
3/8" Stone supplied, 132.00 tons @ \$6.50 per ton .....	858.00
Forbes and Sloat Ltd. (1575.3 tons Class "A" crushed gravel) .....	2,599.25
Journal Voucher (4 Bags cement, 250 bricks) .....	<u>17.90</u>
TOTAL .....	<u>\$ 10,260.47</u>

The Street preparatory work, other than the laying in place of the Chips was done by regular City crews at an expenditure of \$915.63 and was made up as follows:-

City Labor .....	\$ 523.63
Hired Machinery .....	108.00
City Machinery .....	<u>284.00</u>
TOTAL .....	<u>\$ 915.63</u>

The total expenditure for Chip Sealing amounted to \$11,176.10 and was made up as follows:-

City Labor .....	\$ 523.63
Hired Machinery .....	108.00
City Machinery .....	284.00
Flintkote Co. (Materials) ...	7,643.32
Forbes and Sloat (Class "A" Gravel) .....	2,599.25
Materials (Brick and Cement). .	<u>17.90</u>
Total Expenditure..	<u>\$11,176.10</u>

The following streets were Chip Sealed:-

<u>Street</u>	<u>Lineal Feet</u>
Dunn's Crossing Road .....	2,400
Tower Road (portion) .....	<u>800</u>
TOTAL .....	<u>3,200</u>

3,200 lineal feet = .60 miles

In 1969 Forbes and Sloat Limited was awarded a contract to lay pavement, recap and seal various City Streets. Under this heading "Roads and Streets", the following Streets were resealed with 1/4" Hot Mix Asphalt:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Regent -	Campbell Street to Brunswick Street .....	1,005
St. John -	Queen Street to Brunswick Street .....	737
King -	Smythe Street to Northumberland Street....	689
York -	Brunswick Street to Aberdeen Street.....	1,550
Mitchell -	Albert Street to King's College Road.....	991
Brookmount Court and Street .....		586
Manor Court .....		223
Woodbine Court .....		234
Riverdale Court .....		234
Ashland Court .....		234
Fairlawn Court .....		234
Londale Court .....		<u>225</u>
TOTAL .....		<u>6,942</u>

6,942 lineal feet = 1.31 miles

The cost of the above contract was as follows:-

950 Gallons tack coat @ 40¢ per Gallon ....	\$ 380.00
1231.3125 tons asphalt @ \$7.56 per ton .....	<u>9,308.72</u>
TOTAL .....	<u>\$ 9,688.72</u>

The street preparatory work other than the laying in place of the pavement was done by City crews at an expenditure of \$1,493.67, made up as follows:-

Labor .....	\$ 911.67
City Machinery .....	<u>582.00</u>
TOTAL .....	<u>\$ 1,493.67</u>

The total expenditure for resurfacing amounted to \$11,182.39 and was made up as follows:-

City Labor .....	\$ 911.67
City Machinery .....	582.00
Forbes and Sloat (Materials) .....	<u>9,688.72</u>
Total Expenditure ...	<u>\$ 11,182.39</u>

#### ITEM #17

##### Hurricane Gerda:-

On September 9, 1969 the City of Fredericton was hit by a violent wind storm originating in the United States. The cost of cleaning up after this storm amounted to \$1,110.31 and was made up as follows:-

Labor .....	\$ 700.31
Hired Trucks .....	46.00
City Machinery .....	<u>364.00</u>
TOTAL .....	<u>\$ 1,110.31</u>

OTHER EXPENDITURES:-

In addition to the listed expenditures, there is included under "Roads and Streets" an expenditure of \$27,060.44 which does not show in any of the previous accounts and is made up as follows:-

Workmen's Compensation .....	\$ 3,641.72
Mobile Radio (Telephone Company) .....	738.60
Telephone Company (Telephone) .....	70.36
Telephone Company (Relocating outside plant facilities, Golf Club Road) .....	420.00
Chestnut Canoe Co. (Canvas) .....	63.99
Maritime Forest Ranger School (Drainage) .....	30.00
Battery and Electric (Starter cord) .....	8.21
Car Allowance .....	120.00
Provincial Motor Sales (50 lb. dust bane) .....	6.42
Rosser Sales (Point for pavement braker) .....	8.56
Minister of Finance (Registration) .....	216.00
Canadian Good Roads Association (Membership) .....	50.00
Sansom Equipment (2 - 2'6" Rock drills, parts for jack- hammer) .....	762.72
Miles Tire Ltd. (Repair to wheel barrow tire) .....	1.50
City Tire Service (Repair tire farm tractor) .....	1.50
J. L. Simms (Enamel, brush) .....	3.22
Royal Mills Ltd. (Jute bags) .....	20.00
Carleton Safety Supplies (Flags and vest) .....	56.05
E. M. Young (Axes, nails, aluminum ladder, etc.) .....	68.38
Chippin's Clothing and Footwear (Rain suits and coveralls) .....	690.20
Maritime Accessories Ltd. (Brush, case lock thaw) .....	10.83
Auto Machinery (Belts, nipples, goggles, chain falls, etc.) .....	143.57
Neill's Wholesale (Paint, enamel, nails, shovels, picks, etc.) .....	395.65
Langs (Plastic coated mitts) .....	6.36
G. E. Barbour (1 case baking soda) .....	4.39
Elm Glass Ltd. (Paint) .....	7.64
Horsnell's Iron Works (2 Bearings) .....	21.90
Raymond Savage (Keys) .....	1.95
Wood Motors Ltd. (Cleaning car) .....	4.00
H. S. Gill (Lumber) .....	211.94
Unemployment Insurance Commission .....	2,806.75
Department of Labor (Inspectors) .....	7.50
Daily Gleaner (Notice of tender) .....	70.68
Co-op Hardware (Wheelbarrows) .....	68.04
City of Fredericton (City Pension) .....	3,830.76
Canada Pension .....	1,731.26
Fuels and Lubricants .....	9,992.31
Workmen's Compensation (cheques received) .....	834.93
Journal Voucher (Portion of L. McNeill's salary) .....	1,000.00
TOTAL .....	\$ 28,127.89

LESS CREDITS:-

Workmen's Compensation (cheques) .....	\$ 834.93
Province of New Brunswick (refund on Gas Pump License) .....	5.00
Neill's Wholesale (2% Discount on Bill) .....	.51
Mr. G. Bezanson (sale of Axle) .....	10.00
W. Chase (Payment on truck damage) .....	5.00
N. B. Telephone (Payment on long distance calls) .....	7.83

Abe Levine (sale of Scrap Iron) ....	\$ 105.12	
S. Thomas (sale of Batteries) .....	45.00	
Journal Voucher (Catch Basin Cover). .	15.58	
Journal Voucher (Spikes) .....	.90	
Journal Voucher (Parts for Ford Oil Truck charged in error) .....	21.90	
Journal Voucher (Incorrect labor charge on dust control) .....	<u>15.68</u>	\$ 1,067.45
NET EXPENDITURE .....		<u>\$ 27,060.44</u>

TABLE COMPARING YEARLY COSTS OF LABOR AND HIRED  
MACHINERY ON ROADS AND STREETS ITEMS

ITEM	1966	1967	1968	1969
1. Sanding Streets	\$ 9,671.90	14,540.33	16,951.88	18,919.25
2. Snowplowing Sidewalks	2,698.66	6,301.80	4,225.00	6,075.34
3. Snow Control	42,852.10	141,990.38	84,918.49	69,070.15
4. Streets Account	36,796.51	44,879.18	41,071.02	43,927.08
5. Surface Sewer	7,123.47	8,864.87	7,793.61	-----
6. Grading and Gravelling	437.18	932.41	107.17	1,129.04
7. Lincoln Road	1,250.51	148.83	109.90	590.15
8. Wilsey Road	709.41	316.02	339.57	454.09
9. Doak and Flanagan Roads	1,250.76	362.67	422.08	564.87
10. Maryland Road	-----	-----	2.32	833.93
11. Rural Roads	165.40	-----	266.36	87.32
12. Asphalt Repairs	12,850.74	17,286.39	17,421.51	18,653.57
13. Motor Graders	1,132.76	978.67	687.72	848.13
14. Parking Lots	1,266.71	366.65	319.80	1,129.95
15. Clearing along Rights-of-Way	63.94	-----	-----	1,520.85
16. Chip Seal ) Surface Seal )	745.74	-----	244.25	631.63
17. Hurricane Gerda	327.78	-----	-----	911.67
TOTALS =	\$119,343.57	236,968.20	174,880.68	166,093.33

In 1969, Item #5 Surface Sewer, was taken out  
of Roads and Streets and made a separate account, which  
will appear later in this Report.

The following items of machinery were purchased in 1969 and charged to Roads and Streets:-

6 - 1¼ x 5 Asphalt Cutters @ \$19.95 each ....	\$ 119.70	
Plus 8% Provincial Tax .....	<u>9.58</u>	\$ 129.28
1 - Platform Body for Dump Truck 13' x 7' Hardwood Floor, 18" Side Boards and 4' Head Board .....	\$ 536.88	
Plus 8% Provincial Tax .....	<u>42.95</u>	579.83
1 - Ford Bronco Pickup (Red) Serial #9LU14FF53387 .....	\$ 3,851.90	
Less trade in allowance on Jeep #17 888.90		
	<u>\$2,963.00</u>	
Plus 8% Provincial Tax .....	<u>237.04</u>	3,200.04
2 - Auto Oilers @ \$88.00 each .....	\$ 176.00	
Plus 8% Provincial Tax .....	<u>14.08</u>	190.08
1-1969 Ford Custom, 2 Door Serial #9B50F182472 I.G.N. #FA0541 LUGG #FB0666 .....	\$ 3,680.00	
Less Allowance on 1966 Ford 2 Door 1,442.25		
	<u>\$ 2,237.75</u>	
Plus 8% Provincial Tax .....	<u>179.05</u>	2,416.80
1 - 1969 Dodge Truck D500 Serial #D5L2J34528 .....	\$ 6,400.00	
Less trade in allowance 1962		
G.M.C. 3 ton .....	<u>1,300.00</u>	
	\$ 5,100.00	
Plus 8% Provincial Tax .....	<u>408.00</u>	5,508.00
1 - Canadian Ingersol Rand, Model DRAF 150 Air Compressor complete with standard equipment, Unit S/N T.P. 601569 .....	\$ 4,793.00	
Plus 8% Provincial Tax .....	<u>383.44</u>	5,176.44
1 - Model D5 Caterpillar Tractor Serial #96J885 .....	\$ 34,700.00	
Less trade in allowance D-6		
Caterpillar tractor .....	<u>6,750.00</u>	
	\$ 27,950.00	
Plus 8% Provincial Tax .....	<u>2,236.00</u>	30,186.00
TOTAL .....	\$ 47,386.47	

The following is a list of vehicles and machinery used in the Roads and Streets Department, together with the repair costs for 1968 and 1969, including tires and tubes.

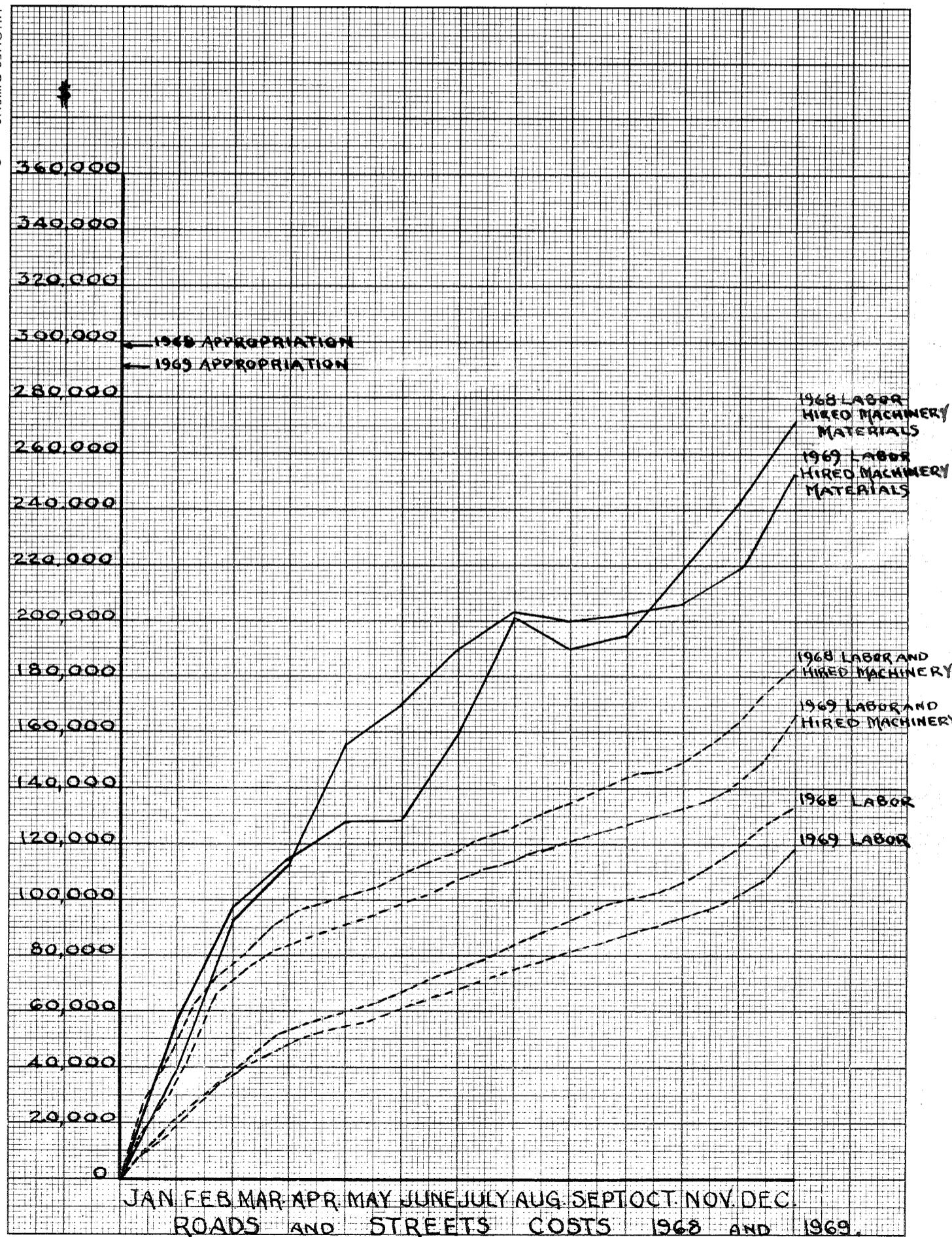
Name of Vehicle	Year Purchased	Repairs 1968	Repairs 1969
Austin Western Grader (300 Pacer)	1962	\$ 3,294.80	\$ 4,383.30
Galion Grader	1961	8,128.17	2,872.22
Galion Grader, Model 118	1966	1,786.67	5,297.88
Caterpillar D-6 Bulldozer (traded in 1969)	1953	753.73	2.37
Caterpillar D-5 Bulldozer	1969	-----	257.65
Case 420 Crawler Tractor	1961	285.50	363.97
TD5 International Crawler Tractor	1963	938.53	2,879.15
Case 750D Bulldozer	1965	627.88	1,863.89
Case 850 Bulldozer	1968	13.01	643.46
Hy Hoe 3/8 yard Backhoe	1964	1,806.16	3,199.05
Unit 3/4 yard Backhoe	1957	706.27	4,326.37
Case W9 Front End Loader	1967	1,485.11	1,844.73
Hough 50 Model Loader	1963	2,295.36	1,926.58
Airpic Compressor	1953	32.98	68.82
Ingersol Rand Compressor	1957	2,118.84	251.19
Opco Compressor	1964	347.24	235.97
Ingersol Rand Compressor	1969	-----	17.23
Tarvia Roller Model #157	1955	281.92	839.65
Willys Jeep #11	1966	227.78	179.96
Willys Jeep #12	1967	195.82	412.28
Willys Jeep #17 (traded in 1969)	1965	171.23	236.68
Ford Bronco	1969	-----	23.66
Willys Jeep #40 (traded in 1968)	1962	89.02	-----
Willys Jeep #40	1968	30.36	46.38
Bombardier	1968	-----	519.65
Dodge 3 ton	1963	1,190.48	816.90
G.M.C. 3 ton (traded in 1969)	1962	421.06	319.25
Dodge 3 ton	1969	-----	33.33
Dodge 3 ton	1967	176.18	192.40
Chevrolet 3 ton	1960	542.40	145.10
Chevrolet 3 ton	1965	638.60	440.32
Chevrolet 1/2 ton	1966	188.61	510.73
International 3 ton	1968	662.81	279.00
Chevrolet Panel (sold to Fire Department in 1968)	1963	49.68	-----
Chevrolet 1/2 ton	1965	278.44	283.38
Dodge 1/2 ton	1967	112.93	316.1
Ford Custom 2 Door (traded in 1969)	1966	429.89	12.03
Ford Custom 2 Door	1969	-----	112.41
G.M.C. Panel	1968	65.06	35.43
Expendable accessories (Grader Blades, Bolts, Nuts, Bulldozer Blades and Corners, Tools, etc.)		1,756.06	1,746.55
TOTAL COST		\$ 32,132.14	\$ 37,935.80

The following equipment is used on Snow Control and the repair and maintenance cost for this equipment is shown as follows:-

Name of Vehicle	Year Purchased	Repairs 1968	Repairs 1969
Sicard Snow Blower #30	1949	\$ 1,700.77	\$ 286.09
Sicard Snow Blower #39 (1952 Model)	1961	810.63	103.69
Sicard Snow Blower #47	1963	707.20	519.84
Ford Sand Spreader	1960	1,020.40	103.01
Coal-Fired Boiler		2.25	----
Oil-Fired Boiler		162.32	251.89
Bombardier	1968	41.85	519.65
TOTAL COST	=	\$ 4,445.42	\$ 1,784.17

The above costs include City labor, outside labor and parts for the equipment shown.

HUGHES OWENS 404G



### CAPITAL ACCOUNT CURB AND GUTTER

The net expenditure under this heading amounted to \$63,108.85.

For the above expenditure of \$63,108.85 concrete curb and gutter was constructed at the following locations:-

<u>Location</u>	<u>Lineal Feet</u>
Smythe Street, Willingdon St. to Prospect Street (both sides) .....	3,086
Prospect Street, Smythe St. west towards Hanwell Road (both sides) .....	2,559
Hanwell Road, Parkhurst Drive to west of C.N.R. track (west side) .....	475
Gregg Court, completion of 1968 program .....	139
College Hill Road, from existing curb to Priestman Street (both sides) .....	1,022
Union Street, Friel Street to City Limits (north side) .....	688
McNair Drive, Industrial Road to Limerick Road (both sides) .....	3,070
Limerick Drive, Hearne Street to McNair Drive (south side) .....	886
Hearne Street, McNair Drive to Limerick Road (both sides) .....	594
Crockett Street, Chestnut St. to Reid Street (south side) .....	239
Willingdon Street, Massey Street west (both sides) .....	1,139
Canterbury Drive, Cambridge Crescent to Topcliffe Crescent (north side and a portion on south side) .....	1,356
Topcliffe Crescent (both sides) .....	3,449
Richards Court (both sides) .....	748
TOTAL .....	19,450

All the above listed Curb and Gutter was constructed by City crews.

All the concrete poured was purchased ready-mixed from the firm of Elmtree Concrete Ltd. at a price of \$14.10 per cubic yard.

The unit cost of one lineal foot of curb and gutter, found by dividing the total length laid, which equals 19,450 lineal feet into the total cost of \$63,108.85 is \$3.24 per lineal foot. The topsoiling of Boulevards is included in this cost.

The unit cost of one lineal foot of curb and gutter minus topsoiling, was \$2.17 per lineal foot and was calculated as follows:-

### Sodding and Seeding Boulevards

Labor .....	\$ 10,154.46
Hired Trucks and Machinery .....	824.75
City Machinery charges .....	1,666.00
Materials (5,283 yards topsoil and 100 lbs. grass seed) .....	8,188.65
TOTAL .....	\$ 20,833.86

Total cost for Curbing, including	
topsoiling .....	\$ 63,108.85
Cost of topsoiling and seeding ...	<u>20,833.86</u>
Total cost of Curbing (above) ....	\$ 42,274.99

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\$42,274.99 = \$2.17 per lineal foot  
19,450

Cost per lineal foot of Topsoiling and Seeding ...\$ 1.07

Labor cost of constructing 1 lineal feet of Curb and  
Gutter, minus Topsoiling and Seeding was 90 cents.

#### CAPITAL ACCOUNT PAVING

As previously stated in this Report, Forbes and Sloat Ltd. was awarded a contract to lay pavement, recap and reseal a number of City Streets. The material cost amounted to \$53,255.35 and was made up as follows:-

#### Forbes and Sloat Limited

4,056.075 tons 3/4" Minus @ \$6.75 per ton..	\$ 27,378.52
503.10 tons 1/2" Dense Mix @ \$7.16 per ton	3,602.20
2,417.70 tons 1/4" Plant Mix @ \$7.56 per ton	18,277.81
9700 Gallons primer @ 22¢ per gallon .....	2,134.00
2800 Gallons tack coat @ 40¢ per gallon....	1,120.00
348.55 tons Class "A" crushed gravel @ \$1.65 per ton .....	575.11
274.45 tons Class "C" gravel @ \$1.45 per ton	<u>397.95</u> \$ 53,485.59

#### W. J. Gorman

38.25 tons Asphalt @ \$9.00 per ton .....	344.25
Bond Discount .....	1,738.80
Miscellaneous (Gas, brick, cement, manholes, pension fund contribution and portions of staff salaries .....	<u>2,926.48</u>
TOTAL .....	\$ 58,495.12

#### LESS CREDITS

Association of Kinsmen Clubs - share of paving Kinsmen Court..	\$ 1,000.00
Province of N. B. (share of paving Gibson St..	<u>4,239.77</u> 5,239.77
NET EXPENDITURE .....	<u>\$53,255.35</u>

The Street preparatory work, other than laying in place of the pre-mixed material, was done by regular City crews at an expenditure of \$8,733.06, made up as follows:-

City Labor .....	\$ 5,325.31
Hired Trucks and Machinery .....	481.25
City Machinery .....	<u>2,926.50</u>
TOTAL .....	<u>\$ 8,733.06</u>

The total expenditure under this heading amounted to \$61,988.41 and was made up as follows:-

City Labor .....	\$ 5,325.31
Hired Trucks and Machinery .....	481.25
City Machinery charges .....	2,926.50
Forbes and Sloat Limited .....	53,485.59
W. J. Gorman .....	344.25
Bond Discount .....	1,738.80
Miscellaneous .....	<u>2,926.48</u>
Total .....	\$ 67,228.18
Less Credits ...	<u>5,239.77</u>
NET EXPENDITURE ....	<u>\$ 61,988.41</u>

The above expenditure of \$61.988.41 was made up as follows:-

- 1) New Pavement, 3/4 " Dense Hot Mix
- 2) Recap 1/2" Minus
- 3) Surface Seal 1/4" Minus

1) New Pavement:-

The following streets were paved with 3/4" Hot Mix by Forbes and Sloat Ltd:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Hearne - McNair Drive to Limerick Road .....	273	
Richards Court .....	263	
McNair Drive - Industrial Road to Limerick Road .....	1,543	
Willingdon - Massey Street south .....	630	
Smythe - Beechwood Crescent to Prospect Street .....	1,502	
Prospect - Smythe Street towards Hanwell Road .....	1,200	
Gregg Court - Completion of 1968 paving of Court .....	143	
Crockett - Reid Street to Chestnut Street .....	231	
Jeffrey Street - between Miles property and Bowlen's Store..	<u>100</u>	
TOTAL .....	<u>5,885</u>	

5,885 lineal feet = 1.11 miles

In addition Kinsmen Court Roadway around building and the Parking Lot were paved with 2" of Asphalt.

For the above, the following materials were used:-

9,700 I.G. Primer @ 22¢ per Gallon .....	\$ 2,134.00
4,055.075 tons of 3/4" Hot Mix Asphalt @ \$6.75 per ton .....	<u>27,378.52</u>
TOTAL .....	<u>\$ 29,512.52</u>

The above listed Streets were laid to a thickness of 3". The street grading and preparatory work was done by regular City crews. The pre-mixed material was supplied by Forbes and Sloat Ltd. from its plant situated at Nashwaak Village on Route #8. The company charged the City of Fredericton \$6.75 per ton in place.

2) Recap 1/2" Minus:-

Following is a list of City Streets recapped:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Kitchen - Beckwith Street to King's College Road .....	1,100	
Regent - Canadian Pacific Railway tracks to Albert St. ..	<u>780</u>	
TOTAL .....	<u>1,880</u>	

1,880 lineal feet = .36 miles

The Company charged the City of Fredericton, \$7.16 per ton in place. The total tonnage amounted to 503.10 tons at a cost of \$3,602.20.

3) Surface Seal 1/4" Minus

The following City Streets were surface sealed with 1/4" Hot Mix:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Waggoner's Lane - Rookwood Avenue to Smythe Street .....	1,312	
Rookwood Avenue - C.N.R. to Waggoner's Lane .....	439	
Spruce Terrace .....	612	
Crerar Court .....	367	
Hughes Street .....	1,330	
Neill Street - MacLaren Avenue to McEvoy Street .....	860	
Dayton Court .....	265	
Irvine Street - Gibson Street to House No. 773 .....	908	
Titus Street .....	841	
Highland Avenue - St. Marys Street to end of pavement ..	1,420	
St. Marys Street - Union Street to City Line .....	<u>3,400</u>	
Friel Street .....	<u>978</u>	
TOTAL .....	<u>12,732</u>	

12,732 lineal feet = 2.41 miles

The following materials were used:-

950 Gallons tack coat @ 40¢ per gallon ..\$	380.00
1619.50 tons 1/4" Asphalt @ \$7.56 per ton	<u>12,243.42</u>
TOTAL .....	\$ 12,623.42

The Company charged the City of Fredericton \$7.56 per ton in place.

In addition to the above listed streets paved, Gibson Street (Route #8) from Union Street to the City line, a distance of 1.04 miles, was resurfaced on a cost sharing basis with the Province of New Brunswick.

Following is the Cost of this construction:-

City Labor .....	\$ 567.08
City Machinery .....	266.00
Cement, Sand and Brick .....	48.11
5.90 tons Top Asphalt @ \$9.00 per ton .....	<u>53.10</u> \$ 934.29

Cost of 1/4" Minus Asphalt in place with tack coat applied by Forbes and Sloat Ltd.:

1850 Gallons Tack Coat @ 40¢ per gallon .....	\$ 740.00
798.20 tons 1/4" Minus Asphalt @ \$7.56 per ton ...	<u>6,034.39</u> <u>6,774.39</u> 7,708.68

Cost of Engineering and Supervision 10% of above total \$7,708.68 .....	<u>770.87</u>
TOTAL COST .....	\$ 8,479.55

50% of above total is Province of New Brunswick's share .....\$ 4,239.77

CAPITAL ACCOUNT DOMESTIC SEWER

Gross Expenditure and Stocked Material .....	\$ 128,143.05
Less Inventory, Dec. 31,	
1969 .....	<u>8,337.44</u>
	\$ 119,805.61
Credit .....	<u>60,313.27</u>
Net Expenditure .....	\$ 59,492.34

Included in the net expenditure of \$59,492.34 is the amount of \$741.43 holdback from a job completed in 1968 and showing in 1969 accounts (Priestman Street, Regent to Smythe Street).

The above credit is made up as follows:-

Fredericton Housing Ltd. (Woodbridge Street and Canterbury Drive)	\$ 3,775.54
Ropal Investments Ltd. (Colonial Heights)	8,618.99
Hill Bros. Ltd. (Proposed Court off Hanwell Road)	3,683.99
Chippin's Ltd. Real Estate (Ayres St.)	4,140.56
Chippin's Ltd. Real Estate (Dufferin Street)	6,013.80
Chippin's Ltd. Real Estate (Rankine Street, Chippin Court and Tims Court)	10,378.06
Greendale Ltd. (Wright Street)	5,659.46
Hill Bros. Ltd., Cambridge Leasehold Province of N. B. and Commercial Builders Ltd., Prospect Street	10,738.09
Work done and materials sold to Private Parties	1,235.67
Journal Vouchers (Materials paid for by Capital Account Domestic Sewer and charged to other City Departments	<u>6,069.11</u>
TOTAL .....	<u>\$ 60,313.27</u>

Domestic Sewer mains were constructed at the following locations:-

Location	Lineal Feet			
	8"	10"	12"	18"
Ayers Street (Chippin subdivision). Installation by Bemrose and Kilburn crew	750			
Albert Street (Intersceptor Sewer), Installation by City workmen .....				1710
Colonial Heights (Ropal Investments) Installation by Fredericton Housing Crew .....	1600			
Hill Bros. (Hanwell Road to Colonial Heights) Installation by Fredericton Housing crew .....	610			
Rankine Street, Chippin Court and Tims Court (Chippin subdivision) Install- ation by Fredericton Housing Ltd. crew..	1150			
Dufferin Street (Hill Bros. and Chippin subdivision) Installation by Bemrose and Kilburn crew .....	680			
Forest Hill Road (between driveway of Eden Rock Motel and Skyline Motel) Installation by City Workmen .....			601	
Golf Club Road (Extension of existing sewer) Installation by City Workmen ....	448			
Lincoln Road ( Wilsey Road east) Installation by City Workmen .....		845		
Woodbridge Street (Fredericton Housing Ltd. subdivision) Installation by Fredericton Housing Ltd. crew .....	2060			
Wright Street (Greendale subdivision) Installation by Bemrose and Kilburn crew .....	1130			
Prospect Street (Smythe Street to Regent Street) Installation by Maplewood Contracting Ltd. crew (incomplete).....	1325			
TOTALS .....	9753	845	601	1710

The actual cost of installing the above listed Sewer Mains was as follows:-

Location	Payment to Contractors Including Reserve for Holdbacks	City Labor and Machinery	Materials	Total
Ayres Street (Chippin subdivision)	\$ 2,521.50	93.87	1,525.19	4,140.56
Albert St. (Regent to York Street)		15,592.08	13,273.12	28,865.20
Colonial Heights (Ropal Investments)	5,289.00	156.50	3,173.49	8,618.99
Hill Bros. (Hanwell Road to Colonial Heights)	2,246.00		1,437.99	3,683.99
Rankine Street, Chippin Court and Tims Court (Chippin subdivision)	7,080.00	678.90	2,619.16	10,378.06
Dufferin St. (Hill Bros. and Chippin subdivision)	4,375.20	213.28	1,425.32	6,013.80
Forest Hill Road (between driveway of Eden Rock Motel and Skyline Motel)		4,629.20	3,455.44	8,084.64
Golf Club Road (extension)		977.42	1,389.69	2,367.11
Lincoln Road		9,683.50	7,445.30	17,128.80
*Woodbridge Street (existing to Canterbury Drive and Canterbury Drive from Topcliffe Crescent to Woodbridge Street)		205.57	3,569.97	3,775.54
Wright Street (Greendale subdivision)	3,080.00	268.80	2,310.66	5,659.46
Prospect Street (Smythe to Regent Street- partial)	7,152.32	350.79	3,234.98	10,738.09
TOTALS	\$ 31,744.02	32,849.91	44,860.31	109,454.24

\* Labor and Machinery was supplied by Fredericton Housing Ltd. and does not appear on City Accounts.

The above costs include any holdback payments, thus showing the actual cost of construction greater than the net expenditure. To arrive at the cost per foot of construction, the cost of \$104,937.27 (\$109,454.24 minus \$741.43 holdback from 1968 and minus \$3,775.54 partial cost of Woodbridge Street and Canterbury Drive) must be used for determining same.

Total lineal feet laid .... 12,909

Average cost per foot = \$ 104,939.27 = \$ 8.13  
12,909

Cost by Contractor per lineal foot

Location and Contractor	Size of Pipe 8"
Ayers Street (Bemrose and Kilburn) .....	\$ 5.52
Colonial Heights (Fredericton Housing Ltd.) .....	5.39
Proposed Court off Hanwell Road (Fredericton Housing Ltd.) .....	6.04
* Rankine Street, Chippin and Tims Court (Fredericton Housing Ltd.) .....	9.02
* Dufferin Street (Bemrose and Kilburn) .....	8.84
Wright Street (Bemrose and Kilburn) .....	5.00
+ Prospect Street (Maplewood Construction Co.), incomplete in 1969 .....	8.10

\* Rock

+ Partial Rock

All above Domestic Sewers laid in a common  
trench.

Cost by City Crews and Machinery per lineal foot

Location	Size of Pipe			
	8"	10"	12"	18"
Albert Street, York St. to Regent St. 18" Concrete Pipe (including resealing Street)				\$ 16.88
Forest Hill (between Eden Rock Motel and Skyline Motel)			\$ 13.45	
Golf Club Road (extension of existing sewer to City Line)	\$5.28			
Lincoln Road (Wilsey Road east)		\$ 20.27		

All paved streets put in a satisfactory  
condition after excavation.

Included in the above expenditure under this  
heading "Capital Account Domestic Sewer" was the  
resealing of Albert Street from Regent Street to York  
Street, a distance of 1650 feet.

Following is the amount of materials used and cost:-

250 Gallons tack coat @ 40¢ per gallon .....	\$ 100.00
220.15 tons 1/4" Minus @ \$7.56 per ton .....	<u>1,664.33</u>
TOTAL .....	<u>\$ 1,764.33</u>

Also included was a labor expenditure of \$31.14 for surveying Parkside Drive (Nashwaaksis Realty Co.) for sewerage.

Materials in Stock, December 31, 1969:-

318 lineal feet of 8" Terra Cotta Pipe @ \$0.86 per foot ...\$	273.48
32½ lineal feet of 12" Terra Cotta Pipe @ \$1.55 per foot ..	50.38
2565 lineal feet of 8" Asbestos Pipe @ \$1.59 per foot .....	4,078.35
743 lineal feet of 10" Asbestos Pipe @ \$2.09 per foot .....	1,552.87
744 lineal feet of 12" Asbestos Pipe @ \$2.40 per foot .....	1,785.60
12 Manholes (Covers and Frames) @ \$49.73 each .....	<u>596.76</u>
TOTAL .....	<u>\$ 8,337.44</u>

Under this heading the following Pump was purchased from Sansom Equipment Ltd. and installed at the Wilsey Road Lift Station:-

1 - T4A3-B Gorman-Rupp 4" x 4 Self Priming Centrifugal Pump with 10 H.P. ....	\$ 1,611.13
Pump Serial No. (TEFC3/220/60 Frajme 256U Horizontal 15737 (V Belt Base, V Belt drive (and guard	
1 - Size 2 Cema 4 Water tight magnetic starter with hand off Auto selector .....	178.19
1 - Set Flygt Level Regulators 20' Cables.....	<u>95.00</u>
	\$ 1,884.32
Less Federal Sales Tax .....	146.32
	\$ 1,738.00
Plus 8% Provincial Tax .....	<u>139.04</u>
TOTAL .....	<u>\$ 1,877.04</u>

CAPITAL ACCOUNT SURFACE SEWER

Gross Expenditure and Stocked	
Material .....	\$ 160,217.53
Less Inventory December 31, 1969 ....	<u>8,366.23</u>
	\$ 151,851.30
Credits .....	<u>88,368.04</u>
Net Expenditure .....	\$ 63,483.26
	<u>                </u>

Included in the above expenditure of \$63,483.26 is the amount of \$1,323.00 holdback from a job completed in 1968 and showing in 1969 accounts.

The above credit is made up as follows:-

Fredericton Housing Ltd. (Woodbridge )	
Street and Canterbury }	
Drive }	\$ 5,549.31
Ropal Investments Ltd. (Colonial	
Heights) }	10,607.43
Chippin's Ltd. Real Estate (Ayers	
Street) }	7,639.34
Chippin's Ltd. Real Estate (Dufferin	
Street) }	Improvement 9,069.94
Chippin's Ltd. Real Estate (Rankine	
Street, Chippin and	
Tims Courts) }	Charges 16,989.98
Greendale Ltd. (Wright Street)	
Hill Bros. Ltd., Cambridge Leasehold	
Province of N. B. and	
Commercial Builders Ltd.	
(Prospect Street) }	16,120.67
Work done and Materials sold to Private Parties	2,293.12
Journal Voucher (Materials paid for by Capital Account	
Surface Sewer and charged to other City	
Departments) }	<u>10,879.13</u>
TOTAL .....	\$ 88,368.04
	<u>                </u>

Under this heading, Surface Sewer Mains and Laterals were constructed at the following locations:-

Location	Lineal Feet					
	10"	12"	15"	18"	24"	36"
Ayers Street (Chippin Subdivision- Installation by Bemrose and Kilburn Crew) .....	50				755	
Colonial Heights (Ropal Investments- Installation by Fredericton Housing Ltd. Crew) .....	152	823	514			
Rankine Street, Chippin Court and Tims Court (Chippin subdivision- Installation by Fredericton Housing Ltd. crew) .....	150	750	400			
Dufferin St. (Hill Bros. and Chippin subdivision-Installation by Bemrose and Kilburn crew) .....	60	6	680			
Golf Club Road, Woodstock Road to City Line (Installed by City workmen) .....	60	18	216	510		
Hanwell Road from C.N.R. track to City Line (Laterals) Installed by City workmen .....	160					
Woodbridge St. from existing to Canterbury Drive (Fredericton Housing subdivision) Installation by City Workmen .....	180	606	1409	50		
Wright Street (Greendale sub- division - installation by Bemrose and Kilburn crew) .....	108	515	662			
Back Drain (Acacia Court - Installation by City workmen).....	40					
Canterbury Drive, Back of lots facing Canterbury Drive, Topcliffe Crescent to Cambridge Street incomplete (Installation by Fredericton Housing Ltd.).....						800
Prospect Street, Smythe Street to Regent Street, incomplete (Installation by Maplewood Construction Co.) .....	184	600	635	60	174	
Heather Terrace (Installation by City workmen) .....						132
TOTALS .....	1144	3518	4516	1375	306	800

Total lineal feet ..... 11,659

An itemized account was kept of installing Surface Sewers at the following locations:-

Location	Payment to Contractors Including Reserve for Holdbacks	City Labor and Machinery	Materials	Total
Ayers Street	\$ 4,245.00	243.13	3,145.51	7,633.64
Back Drain (Acacia Court)		128.29	62.02	190.31
Colonial Heights	5,758.40	280.54	4,568.49	10,607.43
Rankine Street, Chippin Court and Tims Court	11,748.00	262.20	4,979.78	16,989.98
Charing Crescent			205.20	205.20
Dufferin Street	6,418.00	273.59	2,378.35	9,069.94
Golf Club Road (existing to City Line)		4,449.79	5,357.87	9,807.66
Hanwell Road (from C.N.R. tracks to City Line, laterals)		8,090.22	1,524.34	9,614.56
Canterbury Drive, back of lots facing Canterbury Drive	3,430.00	153.41	14,714.05	18,297.46
*Woodbridge Street and Canterbury Drive		390.22	5,159.09	5,549.31
Wright Street	5,105.25	189.95	3,923.92	9,219.12
Prospect Street, Regent to Smythe Street (incomplete)	9,372.52	409.83	6,338.32	16,120.67
Heather Terrace		1,561.93	623.51	2,185.44
TOTALS	\$ 46,077.17	16,433.10	52,980.45	115,490.72

\* Labor and Machinery was supplied by Fredericton Housing Limited and does not appear on City Accounts.

Following is the cost of laying various sizes of pipe including Catch Basins in place by contractors and City workmen and machinery.

#### Cost by Contractor - per lineal foot

Location	Concrete Pipe			
	18"	15"	12"	10"
Ayers Street	\$ 9.62			7.40
Colonial Heights		7.62	6.92	6.54
*Rankine Street, Chippin and Tims Courts		13.60	12.90	12.52
*Dufferin Street		12.28	11.08	10.70
Wright Street		7.67	6.72	6.34

\* Rock

Cost by City Crews and Machinery - per lineal foot

Location	Concrete Pipe				
	24"	18"	15"	12"	10"
Golf Club Road Heather Terrace	\$ 16.55	12.52	11.88	11.18	10.80

Included in the above expenditure under the above heading "Capital Account Surface Sewer" is a labor charge of \$31.15 for work done on Parkside Drive (Nashwaaksis Realty Co.) and an expenditure of \$1274.85 to Seaboard Surveys Ltd. for surveying the Back Drain, from University Avenue to Waterloo Row.

Stock on hand December 31, 1969:-

702 lineal feet of 10" Concrete Pipe @ \$1.13 per foot .....	\$ 793.26
693 lineal feet of 12" Concrete Pipe @ \$1.51 per foot .....	1,046.43
700 lineal feet of 15" Concrete Pipe @ \$2.21 per foot .....	1,547.00
548 lineal feet of 18" Concrete Pipe @ \$2.85 per foot .....	1,516.80
120 lineal feet of 30" Concrete Pipe @ \$7.21 per foot .....	865.20
48 lineal feet of 24" Concrete Pipe @ \$5.82 per foot .....	279.36
32 lineal feet of 36" Concrete Pipe @ \$10.17 per foot .....	325.44
31 Catch Basins (Covers and Frames) @ \$50.04 each .....	1,551.24
25 Pre-Cast Bottoms @ \$17.66 each .....	441.50
TOTAL .....	\$ 8,366.23

CAPITAL ACCOUNT WATER

Gross Expenditure and Stocked Material .....	\$ 373,162.54
Less Inventory, December 31, 1969 .....	48,015.02
	\$ 325,147.52
Less Credits .....	<u>128,852.11</u>
Net Expenditure .....	\$ 196,295.41

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Included in the net expenditure of \$196,295.41 is the amount of \$839.21 holdback from a job completed in 1968 and shown in 1969 accounts.

The above credit is made up as follows:-

Fredericton Housing Ltd. (Woodbridge ) Street and Canterbury Drive) .....	\$ 10,144.16
Ropal Investments Ltd. (Colonial Heights) .....	20,431.41
Chippin's Ltd. Real Estate (Ayers St.) ) Chippin's Ltd. Real Estate (Dufferin Street) .....	Local 9,687.79
Chippin's Ltd. Real Estate (Rankine Street, Chippin and Tims Courts) ..	Improvement 8,076.74
Greendale Ltd. (Wright Street) .....	Charges 14,917.94
Hill Bros. Ltd., Cambridge Lease- holds, Province of New Brunswick and Commercial Builders Ltd. (Prospect Street) .....	9,926.94
	19,763.66
Work done and materials sold to Private Parties .....	4,911.57
Journal Voucher (Materials paid for by Capital Account Water and sold to other City Departments) .....	<u>30,991.90</u>
TOTAL .....	\$ 128,852.11

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Water Main installations were made at the following locations:-

Location	Lineal Feet				
	4"	6"	8"	10"	12"
Ayers Street (Chippin subdivision) Installed by Bemrose and Kilburn crew Barker Street, from existing to Sewerage Disposal Plant, installed by City workmen .....		20			770
Colonial Heights (Ropal Investments) Installation by Fredericton Housing Ltd. crew .....	378				
Dufferin Street, (Hill Bros. and Chippin subdivision) Installation by Bemrose and Kilburn crew .....		2500			
Golf Club Road, Woodstock Road to City Line, installation by City workmen...		40	680		
Rankine Street, Chippin Court and Tims Court (Chippin subdivision), installation by Fredericton Housing Ltd. Crew .....	370	805			
Woodbridge Street (Fredericton Housing Ltd. subdivision), installa- tion by Fredericton Housing Ltd. crew .....		900			
Wright Street (Greendale subdivision) installation by Bemrose and Kilburn crew .....		1220	477	355	
Prospect Street, (Smythe Street to Regent Street) installation by Maplewood Contracting Ltd. crew .....		40	1240		
(incomplete)		60			1425
TOTALS .....	748	5585	2397	355	2195

Total lineal feet ..... 11,280

An itemized account was kept of installing Water Mains at the following locations and expenditures were made up as follows:-

Location	Payment to Contractors Including Reserve for Holdbacks	City Labor and Machinery	Materials	Total
Ayers Street (Chippin subdivision)	\$ 3,094.00	140.28	6,453.51	9,687.79
Barker Street (existing to Sewerage Disposal Plant)		744.96	80.55	825.51
Colonial Heights (Ropal Investments and Hill Bros.)	8,956.00	556.91	9,879.50	19,392.41
Dufferin Street	4,160.00	231.87	3,684.87	8,076.74
Golf Club Road		2,825.47	3,291.63	6,117.10
Rankine Street, Chippin and Tims Courts (Chippin subdivision)	9,250.00	285.04	5,382.90	14,917.94
*Woodbridge St. (Fredericton Housing Ltd.)		91.80	10,052.36	10,144.16
Wright St. (Greendale Ltd.)	3,608.00	221.00	6,097.94	9,926.94
Prospect St. (Smythe St. to Regent St.)	5,503.32	1,233.45	13,026.89	19,763.66
TOTALS	\$ 34,571.32	6,330.78	57,950.15	98,852.25

\* Labor and Machinery supplied by Fredericton Housing Ltd. and does not appear on City Accounts.

Charged to this account is an expenditure of \$1,309.00 for surveying by Trainor Surveys of a portion of Colonial Heights and a proposed street to Hanwell Road and also an expenditure of \$31.15 for work done on Parkside Drive (Nashwaaksis Realty Co.).

All above costs include any holdback payments which will appear in 1970 accounts.

The following shows the cost per foot for laying various sizes of Cast Iron Pipe by Contractors and City workmen and includes gates and manholes, but does not include fire hydrants.

#### Cost by Contractors per lineal foot

Location	Size of Pipe				
	4"	6"	8"	10"	12"
Ayers Street	\$	7.64			12.38
Colonial Heights		7.76			
Dufferin Street		9.91	11.44		
*Rankine Street, Chippin and Tims Courts	10.93	12.09			
Wright Street		6.52	7.80		

\* Rock

Cost by City Crews and Machinery - per Lineal Foot

Location	Size of Pipe
	6"
Golf Club Road	\$ 7.60

Total Inventory as of December 31, 1969 ...\$48,015.02

In addition to the laying of the above listed Water Mains the following is included under this heading:-

- 1) Water-High Level Reservoir
- 2) Water Intermediate Level Reservoir
- 3) Development of Well #5, Woodstock Road

1) Water - High Level Reservoir

In 1968 a site on Regent Street, near the Trans Canada Highway was purchased by the City of Fredericton from Mr. Leith Draper for a Reservoir for the High Level Water System.

In 1969 Canada Gunite Co. Ltd. was awarded a contract to construct a 250,000 Gallon Reservoir on this site at a price of \$159,000.00. To date this Reservoir has been constructed and connected to the Water Main on Regent Street, and on December 31, 1969 put in operation. Landscaping, etc. will be completed on this site in 1970.

The expenditure in 1969 amounted to \$150,462.14 and is made up as follows:-

MacLaren Associates Ltd. (Engineering Services) .....	\$ 2,079.91
Daily Gleaner (Ad pre-stressed tank) .....	10.50
C. N. Express (Tank plans to Canada Gunite Co. Ltd.) ....	3.25
Atlas Building Supplies (2 sheets Styrofoam) .....	8.29
J. L. Simms (Handles, hinges, plywood) .....	17.53
E. M. Young (Plastic and no-corrode pipe) .....	95.60
Canada Gunite Co. Ltd. .....	133,798.50
City of Saint John (Rental on Topping machine) .....	82.36
Wendall Thomas (928 yards sand) .....	928.00
L. E. Shaw (4800 bricks) .....	210.44
Horsnell's Ltd. (Tie-rods) .....	98.58
Crane Ltd. (Valves, nipples, bushings) .....	11.44
Forward .....	\$ 137,344.40

	Carried Forward .....	\$ 137,344.40
Mr. Don Cameron (Expenses cutting pipe) .....	41.00	
Forbes and Sloat (20.05 tons Class "A" gravel) .....	33.08	
City Labor .....	3,267.46	
Hired Machinery .....	78.25	
City Machinery .....	2,464.00	
Journal Voucher (Pension Fund) .....	159.31	
Journal Voucher (Diesel Fuel) .....	1.62	
Journal Voucher Materials (Pipe and Cement) .....	<u>7,073.02</u>	
	TOTAL .....	\$ 150,462.14

564 feet of 12" Cast Iron Water Pipe was used to connect the Reservoir to the City Water Main on Regent Street and 136 feet of 10" Concrete Pipe was used for the construction of a Surface Sewer from the Reservoir Site to the ditch along the Trans Canada Highway.

Expenditures to date for the above construction are as follows:

1967 .....	\$ 124.10
1968 .....	9,859.01
1969 .....	<u>150,462.14</u>
Total Expenditure (1967-1969)	\$ 160,445.25

## 2) Water - Intermediate Level Reservoir

In 1968 Canada Gunite Company Limited was awarded a contract to construct a pre-stressed concrete cylindrical ground storage reservoir (capacity 1,000,000 gallons) off Montgomery Street on the Odell Park property at a contract price of \$109,450.00.

Expenditure 1969 .....\$ 15,644.31

The above expenditure of \$15,644.31 is made up as follows:-

Canada Gunite Co. Ltd. .....	\$ 15,596.63	
McLaren Atlantic Ltd. .....	23.24	
Labor (City) .....	23.07	
Journal Voucher (Pension Fund) .....	<u>1.37</u>	
	TOTAL .....	\$ 15,644.31

Expenditures to date:-

1968 .....	\$ 101,974.63
1969 .....	<u>15,644.31</u>

Total Expenditure 1968-	
1969 ...\$ 117,618.94	

The expenditure of \$117,618.94 is made up as follows:-

Payment to Canada Gunite Co. Ltd. ....	\$ 103,977.50
W. R. and W. W. Thomas (1022 yards sand @ \$1.10 per yd.).	1,124.20
MacLaren Atlantic Ltd. (Engineering services) .....	4,925.69
Sub-Surface Surveys (Foundation investigation) .....	870.06
Daily Gleaner (Tender call for reservoir) .....	10.50
Horsnells (making tie-rods) .....	29.09
Journal Voucher (Materials connecting reservoir to water main) .....	3,120.53
Journal Voucher (City machinery) .....	1,483.00
Journal Voucher (City labor) .....	1,992.23
Journal Voucher (Pension contribution) .....	86.14
Total .....	<u>\$ 117,618.94</u>

The above Reservoir was put in operation December 31, 1968.

### 3) Development of Well #5

In 1968 International Water Supply was awarded a contract to develop Well #5, Overhaul Pump #2 on Saunders Street and install same in a new Pump House. The contract price being \$45,292.00. In 1968 Well #5 was developed and tested and a contract entered into with Fredericton Housing Limited to construct a Pump House to house the above mentioned Pumping Equipment. The contract price of this construction was \$7400.00.

The connecting of the Well to the City water supply line in Wilmot Park, construction of Pump House and the installation of Pumping Equipment was completed in 1969.

This Well is situated on Woodstock Road on the south bank of the St. John River, just west of the Royal Canadian Mounted Police property, on property acquired from the Province of New Brunswick.

This Well was put in operation June 21, 1969 and is estimated to produce 900 I. G. P. M.

Expenditure 1969 .....\$ 26,272.48

The expenditure of \$26,272.48 is made up as follows:-

International Water Supply .....	\$ 7,616.71
John Gibson and Son (Grass seed) .....	11.50
Fredericton Housing Ltd. ....	7,400.00
Bemrose and Kilburn (7 yards sand) .....	7.00
Melanson Electric (moving and connecting pump electrical equipment) .....	651.77
Horsnells Ltd. (work on pipe) .....	73.52
S. T. E. Fetterly (Air valve) .....	78.25
Neill's Wholesale (Nipple, Tees, Bushings) .....	9.95
Provincial Artisans (stakes) .....	4.75
City Labor .....	1,822.23
Hired Trucks .....	112.50
Journal Voucher (Pension Fund) .....	83.70
Journal Voucher (Machinery) .....	722.00
Journal Voucher (Sidewalk and curb repairs).....	545.00
Journal Voucher Materials (cement, brick, pipe, tees,etc.)	<u>7,133.60</u>
TOTAL .....	\$ 26,272.48

Expenditure on completed Well:-

1968 .....	\$ 43,233.90
1969 .....	<u>26,272.48</u>
Total expenditure 1968-1969 .....	\$ 69,506.38

The above expenditure of \$69,506.38 is made up  
as follows:-

International Water Supply (\$45,292.00, less \$96.64) ...	\$ 45,195.36
MacLaren Associates Ltd. (Engineering services) .....	5,237.77
Canadian Pacific Railway (Well plans to International Water Supply) .....	3.25
Daily Gleaner (Ad re #5 Well and printing tender) .....	19.80
Seaboard Surveys (Prints, survey of new Site) .....	246.64
John Gibson and Son (Grass seed) .....	11.50
Fredericton Housing Ltd. ....	7,400.00
Bemrose and Kilburn (7 yards sand) .....	7.00
Melanson Electric (Moving and connecting pump) .....	651.77
Horsnells Ltd. (Work on pipe) .....	73.52
S. T. E. Fetterly (Air valve) .....	78.25
International Water Supply (Sealing and packing, painting) .....	39.80
Neill's Wholesale (Nipple, Tees, Bushings) .....	9.95
Provincial Artisans (Stakes) .....	4.75
City Labor .....	1,923.88
Hired Trucks and Machinery .....	112.50
Journal Voucher (Pension contribution) .....	86.04
Journal Voucher (City Machinery) .....	726.00
Journal Voucher (Sidewalk and curb repairs) .....	545.00
Journal Voucher (Cement, brick, pipe, tees, etc.) .....	<u>7,133.60</u>
Total Expenditure .....	\$ 69,506.38

30' - 8" and 865' - 12" Cast Iron Pipe was  
used in connecting Well #5 to the City supply line  
in Wilmot Park.

A summary of ground water exploration and development costs from 1953 to December 31, 1969 is as follows:-

Cost of Well Water Supply to Date (South Side)

1953 Test Hole Program .....	\$ 7,500.00
1954 Supply line and partial development of #1 Well ...	42,271.16
1955 Develop, House and Connecting of #1 Well .....	22,883.05
1956 Remote Control and Landscaping .....	3,048.33
1957 Develop, House and Connecting #2 Well .....	44,217.72
1958 Holdbacks, etc. ....	7,641.01
1958-1959 Test Hole Program .....	24,294.40
1960-1961 Develop, House and Connecting #3 Well .....	46,554.32
1961 Develop, House and Connecting #4 Well .....	42,834.45
1962 Remote Control and Landscaping #4 Well .....	1,011.41
1965 Test Hole Program (Water Exploration) .....	13,597.08
1966-1967 Develop, House and Connecting Cameron Court Well .....	26,642.17
1966 Test Hole Program (Continuation of 1965 program) ..	5,143.07
1966-1967 Drilling and Testing Well, St. Anne's Point, Woodstock Road, together with a report on future supply.....	6,788.70
1968 Developing and Testing Well #5, St. Anne's Point, Woodstock Road .....	43,233.90
1969 Housing, installing Pumping equipment, connecting #5 Well, St. Anne's Point, Woodstock Road to City supply line in Wilmot Park and Landscaping .....	26,272.48
TOTAL .....	\$ 363,933.25

Capacity available in 1969 ..... 3300 I.G.P.M.  
 Present average demand ..... 1375 I.G.P.M.  
 Maximum demand ..... 1900 I.G.P.M.

CAPITAL ACCOUNT GRAVEL ROADS

Gross Expenditure .....	\$ 131,770.64
Credits .....	<u>83,050.25</u>
Net Expenditure .....	\$ 48,720.39

The above credits are made up as follows:-

Fredericton Housing Ltd. (Surrey Crescent) ...	\$ 8,078.24
Fredericton Housing Ltd. (Woodbridge St.) and Canterbury Drive) .....	10,370.11
Ropal Investments Ltd. (Colonial Heights) ...	14,906.49
Chippin's Ltd. Real Estate (Ayers Street) ...	6,841.31
Chippin's Ltd. Real Estate (Dufferin St.) ...	7,960.79
Chippin's Ltd. Real Estate (Rankine St. and Chippin and Tims Courts) .....	12,431.29
Greendale Ltd. (Wright Street) .....	12,121.75
Hill Bros. Ltd., Cambridge Leaseholds, Province of New Brunswick and Commercial Builders (Prospect St.) ...	219.03
Appropriation for Maple Street .....	10,000.00
Journal Voucher (Materials) .....	94.95
Journal Voucher (Correction on Invoice) .....	<u>26.29</u>
TOTAL .....	<u>\$ 83,050.25</u>

Included in the above expenditures are:-

- 1) Grading and Gravelling Curbed Streets
- 2) Gravel Road Construction

**1) Grading and Gravelling Curbed Streets**

The list of Streets under this heading will be found under "Capital Account Curb and Gutter" which is contained in the body of this Report on page 24. The expenditure for gravelling Curbed Streets amounted to \$23,546.45.

**2) Gravel Road Construction**

The cost of constructing and gravelling the following Streets under this heading was as follows:-

Location	Lineal Feet	Expenditure
*Surrey Crescent (completed construction in 1969) .....	1,353	\$ 8,078.24
Woodbridge Street and Canterbury Drive (Topcliffe Crescent to Woodbridge St.) ...	1,893	10,370.11
Colonial Heights .....	1,672	14,906.49
Rankine Street, Chippin and Tims Courts ...	1,192	12,431.29
Dufferin Street .....	700	7,960.79
Ayers Street .....	691	6,841.31
Waggoner's Lane (existing to Hanwell Road) ...	419	6,718.34
Wright Street .....	1,600	12,121.75
<b>TOTALS ...</b>	<b>9,520</b>	<b>\$ 79,428.32</b>

\* Expenditure on this Road 1968 - \$277.23  
plus gravel supplied by Fredericton  
Housing Ltd.

9,520 lineal feet = 1.180 miles

In addition Prospect Street from Station 12+00 to the Hanwell Road, approximately 4300 feet, was chip sealed by Flintkote Company.

The expenditure amounted to \$15,523.15 and was made up as follows:-

3/4" Stone, 622.50 tons @ \$5.50 per ton ....	\$ 3,423.75
1/2" Stone, 280.05 tons @ \$6.00 per ton ....	1,680.30
3/8" Stone, 235-85 tons @ \$6.50 per ton ....	1,533.03
Colas RS1K, 22017 gallons @ \$0.36 per gallon .....	7,926.12
Forbes and Sloat (252.80 tons Class "A" gravel) .....	417.12
City Labor .....	225.91
Hired Machinery .....	56.00
City Machinery .....	232.00
Materials (brick, cement) .....	<u>28.92</u>
TOTAL .....	<u>\$ 15,523.15</u>

Also included under the heading "Capital Account Gravel Roads," expenditures were made at the following locations:-

<u>Location</u>	<u>Expenditure</u>
Charing Crescent (surveying) .....	\$ 103.42
Dunn's Crossing Road (purchase of stakes) .....	8.75
McLeod Avenue (Seaboard Surveys and City labor) .....	530.17
Parkside Drive (surveying) .....	71.14
Prospect Street (Incomplete in 1969) Smythe Street to Regent Street .....	219.03
Priestman Street (Incomplete) Regent Street to College Hill Road .....	823.25
*Maple Street .....	<u>5,972.00</u>
TOTAL .....	<u>\$ 7,727.76</u>

\* In 1968 the City of Fredericton entered into an agreement with the Province of New Brunswick to extend Maple Street in Nashwaaksis from Douglas Avenue to St. Mary's Street in order to alleviate the traffic on Union Street. The City of Fredericton purchased the right of way and the Province of New Brunswick constructed the Road.

The City's cost for this project was \$5,972.00 and was made up as follows:-

Trainor Surveys (Surveying and transferring property) .....	\$ 972.00
Vernon and Dale Green (Acquisition of property) .....	4,000.00
Ida Parker (Acquisition of property) .....	<u>1,000.00</u>
TOTAL .....	\$ 5,972.00

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#### CAPITAL ACCOUNT FOREST HILL ACCESS ROAD

Expenditure .....\$ 1,731.50

The above expenditure was for synchronizing lights, laying concrete pipe and installing Catch Basins inside the sidewalk to take care of surface drainage, together with Rip Rapping for bank protection.

C.P.Railway (Synchronizing lights)....	\$ 157.81
City Labor .....	736.17
Hired Machinery .....	276.25
City Machinery .....	391.00
Pension (contribution) .....	33.09
Materials (Catch Basin, cement, brick, pipe) .....	<u>137.18</u>
TOTAL .....	\$ 1,731.50

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#### CAPITAL INDUSTRIAL DEVELOPMENT - A.D.B.

Expenditure .....\$ 1,085.45

The above expenditure was for clearing right-of-way in the Industrial Park.

Labor .....	\$ 709.33
City Machinery .....	324.00
Journal Voucher (Pension contribution) .....	19.57
Journal Voucher (Gas, diesel fuel)..	<u>32.55</u>
TOTAL .....	\$ 1,085.45

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The Federal Government on behalf of the former A.D.B., under an agreement with the City of Fredericton, paid \$24,705.23 as first installation on the shared cost program.

## CAPITAL MAINTENANCE DEPOT

In 1968 the City purchased land from Crown Assets Disposal Corporation on the east side of Maryland Hill Road, beyond the Trans Canada Highway. Due to experiments being conducted on the property by the University of New Brunswick, the City of Fredericton traded this section of land for a section of land of the University of New Brunswick, on the west side of Maryland Hill Road beyond the Trans Canada Highway.

In 1969 the City of Fredericton entered into a contract with Maritime Engineering Ltd. to construct a maintenance depot on this property at a cost of \$189,630.00. This project will be completed in 1970.

Gross Expenditure .....	\$ 97,204.90
Credit .....	<u>746.32</u>
Net Expenditure .....	\$ 96,458.58

The above credit of \$746.32 was for the sale of pulpwood to J. D. Irving.

The gross expenditure of \$97,204.90 is made up as follows:-

Sullivan Well Drilling (6" Well, 300' @ \$6.00 per foot)....	\$ 1,800.00
A.D.I. (Field and Office supervision, design, etc.).....	10,026.61
Maritime Engineering Ltd. ....	72,613.80
Brick Hill Equipment Ltd. (Rental on D-6 tractor) .....	783.00
W. R. Thomas (hauling 39.28 cords pulp @ \$4.00 per cord) .....	157.12
Forbes and Sloat (264.50 tons Class "C" gravel) .....	383.53
Bond Discount .....	4,200.00
Millar Motors (8 flat files) .....	8.00
Provincial Artisans (stakes) .....	5.51
Journal Voucher (Pension contributions) .....	142.04
City Labor .....	3,223.05
Hired Trucks .....	403.00
City Machinery .....	3,421.00
Journal Voucher (Diesel fuel, gas) .....	38.24
TOTAL .....	\$ 97,204.90

Expenditures to date:-

1968 .....	\$ 14,144.93
1969 .....	<u>96,458.58</u>
Total 1968-1969 ....	\$110,603.51

The expenditure of \$110,603.51 is made up as follows:-

Purchase of property .....	\$ 13,000.00
J. S. Neill Wholesale (axes, files, etc.) .....	46.21
Sullivan Well Drilling .....	1,800.00
A.D.I. (Field and Office supervision, design, etc.) .....	10,026.61
Maritime Engineering Ltd. ....	72,613.80
Brick Hill Equipment Ltd. (Rental on D-6 tractor) .....	783.00
W. R. Thomas (hauling 39.28 cords of pulp @ \$4.00 per cord)	157.12
Forbes and Sloat (264.50 tons Class "C" gravel) .....	383.53
Bond Discount .....	4,200.00
Millar Motors (8 flat files) .....	8.00
Provincial Artisans (stakes) .....	5.51
Journal Voucher (Pension contribution) .....	164.08
City Labor .....	4,098.20
Hired Trucks .....	403.00
City Machinery .....	3,603.00
Journal Voucher (Diesel fuel, gas, oil) .....	<u>57.77</u>
TOTAL .....	\$ 111,349.83
Less Credit 1969 (sale of Pulp) .....	<u>746.32</u>
EXPENDITURE .....	\$ 110,603.51

#### CAPITAL ODELL PARK DEVELOPMENT

Expenditure .....\$ 837.20

Under this heading a Caretaker's residence was constructed by Topmar Housing, under the supervision of Associated Designers. This construction was begun in 1967 and completed in 1968. The above expenditure of \$837.20 was a holdback on the construction in 1968.

Cost of Caretaker's Residence:-

Topmar Housing .....	\$ 13,744.00
Associated Designers....	<u>909.98</u>
Total completed cost ...	\$ 14,653.98

## CAPITAL INDUSTRIAL DEVELOPMENT WILSEY ROAD

Under this heading Water and Sewer was laid on a portion of this Road to service an Abbatoir (owned by Victory Meat Packers). Ashfield Construction Company installed the sewer and water. A lift station was constructed by Robert Dunphy and connected to the sewer mains and the grading and graveling of this Road was done by City crews and machinery.

Expenditure ..... \$ 58,146.18

The above expenditure does not include hold-backs for this construction but will appear in 1970 accounts.

The total expenditure for the above construction including holdbacks is as follows:-

Water .....	\$ 19,316.37
Sewer (Pipe lines) .....	17,361.32
(Lift Station) .....	5,266.10
Gravelling and Grading Road .....	17,481.84
Total Expenditure .....	\$ 59,425.63

An itemized account was kept of installing Water and Sewer on this Road and the expenditure was as follows:-

Location	Payment to Contractors Including Reserve for Holdbacks	City Labor and Machinery	Materials	Total
Wilsey Road (Sewer)	\$ 7,590.00	1,508.75	8,262.57	17,361.32
Wilsey Road (Water)	5,204.50	1,425.99	12,685.88	19,316.37
TOTALS	\$ 12,794.50	2,934.74	20,948.45	36,677.69

Following shows the cost per foot for laying the various sizes of Domestic Sewer and Water Mains and includes gates and manholes, but does not include fire hydrants:-

Location	Domestic Sewer			Water	
	8"	10"	6" Force Main	6"	10"
Wilsey Road	\$ 5.56	6.06	7.26	7.98	11.02

Installations:-

780 lineal feet of 8" A. C. pipe  
620 lineal feet of 10" A. C. pipe  
1280 lineal feet of 6" Ductile pipe  
1710 lineal feet of 10" Cast Iron Pipe  
60 lineal feet of 6" Cast Iron Pipe

## LOCAL IMPROVEMENT 1969

The following summary of Local Improvement Projects undertaken in 1969, show the actual cost of construction (including holdback payments) which was paid by the subdivider.

<u>Location</u>	<u>Service</u>	<u>Cost</u>	<u>No. of Lots</u>
Fredericton Housing Woodbridge St. and Canterbury Drive	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	\$ 10,144.16 3,775.54 5,549.31 10,370.11 <u>4,398.00</u>	40
	TOTAL	<u>\$ 34,237.12</u>	
Ropal Investments Corp. Ltd. Colonial Heights	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	\$ 20,431.41 8,618.99 10,607.43 14,906.49 <u>4,202.00</u>	27
	TOTAL	<u>\$ 58,766.32</u>	
Hill Bros.	D.O.M. Sewer (in same trench with water to Ropal	\$ 3,683.99	(Future completion)
Chippin's Ltd. & Hill Bros. Dufferin Street	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	8,076.74 6,013.80 9,069.94 7,960.79 <u>1,675.00</u>	19
	TOTAL	<u>\$ 32,796.27</u>	
Chippin's Ltd. Rankine Street Chippin Court Tims Court	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	\$ 14,917.94 10,378.06 16,989.98 12,431.29 <u>2,052.50</u>	23
	TOTAL	<u>\$ 56,769.77</u>	
Chippin's Ltd. Ayers Street	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	\$ 9,687.79 4,140.56 7,639.34 6,841.31 <u>1,855.00</u>	15
	TOTAL	<u>\$ 30,164.00</u>	

<u>Location</u>	<u>Service</u>	<u>Cost</u>	<u>No. of Lots</u>
Greendale Ltd. Wright Street	Water Domestic Sewer Storm Sewer Gravel Road Sidewalk	\$ 9,926.94 5,659.46 9,219.12 12,121.75 <u>4,130.00</u>	32
	TOTAL	\$ 41,057.27	
Fredericton Housing Ltd. Surrey Crescent Incomplete 1968	Gravel Road Plus 1968 Costs	\$ 9,078.24 <u>15,733.93</u>	27
	TOTAL	\$ 23,812.17	
Commercial Builders Ltd.	Under construction for Commercial Complex		
Hill Bros. etc. Prospect St. - Regent to Smythe			

SUMMARY OF COSTS TO  
SUBDIVIDERS FOR SERVICES - 1969

<u>Service</u>	<u>Cost</u>
Water	\$ 73,184.98
Domestic Sewer	42,270.40
Storm Sewer	59,075.12
Gravel Road	72,709.98
Sidewalk	<u>18,312.50</u>
TOTAL	\$ 265,552.98

Total number of lots abutting streets fully serviced in 1969 ..... 183.

Note: Fredericton Housing Ltd. supplied crew and equipment on their projects in 1969. All work was carried out under City supervision.

PUBLIC WORKS

Gross Expenditure .....	\$ 64,634.15
Credits .....	<u>7,685.90</u>
Net Expenditure .....	\$ 56,948.25
1969 Appropriation .....	<u>47,400.00</u>
DEFICIT ...	\$ 9,548.25

The credits of \$7,685.90 are made up as follows:-

Atlas Construction Co. (return of plans) .....	\$ 20.00
Payment by casual laborers for raincoats .....	59.62
Hogan's Red and White Store (Removing stump) .....	6.24
Credit re payment for steel toe boots .....	112.63
Frank Budovitch (removing stump) .....	21.92
Coy's Bakery (removing stump) .....	20.00
Payment of long distance calls by City workmen .....	18.08
Journal Voucher (Mobile Radios) .....	5,501.99
Journal Voucher (4 quarts mixed oil) .....	2.00
Journal Voucher (Fertilizer) .....	264.42
Journal Voucher (City machinery rental) .....	1,641.50
Journal Voucher (5'-15" Armco pipe with couplings) .....	<u>17.50</u>
TOTAL .....	\$ 7,685.90

The labor, hired trucks and city machinery charges under Public Works expenditure was incurred as follows:-

Item	Labor	Hired Trucks	City Machinery
Trees	\$ 18,678.68	\$ 1,816.15	\$ 5,288.00
Back Drain Diversion	662.93	79.75	198.00
Back Drain	188.49	119.50	26.00
Survey	851.65	----	28.00
Surface Sewer	----	----	----
Unforseen	5,363.60	140.50	798.00
Casuals' Vacation Pay	<u>5,265.55</u>	----	----
TOTALS	<u>\$ 31,010.90</u>	<u>\$ 2,155.90</u>	<u>\$ 6,338.00</u>

TREES:-

Expenditure ..... \$ 35,281.13

The above expenditure of \$35,281.13 is made up as follows:-

Labor .....	\$ 18,678.68
Hired Trucks .....	1,816.15
City Machinery .....	5,288.00
Materials .....	8,898.30
Mr. Charles Smith (Honorary for services rendered) .....	<u>600.00</u>
TOTAL .....	<u>\$ 35,281.13</u>

In 1969, 173 trees were removed upon the recommendation of the Fredericton Tree Commission. The condemned trees were either in a decadent condition, a menace to public safety or possible breeding places for the Elm Bark Beetle.

Following is a list of trees removed in 1969:-

<u>Species</u>	<u>Number Removed</u>
Elm	138
Maple	12
Poplar	4
Spruce	4
Pine	1
Ash	2
Basswood	1
Birch	1
Chinese Elm	<u>10</u>
Total all species	<u>173</u>

The procedure followed at the present time is as follows:-

The trees are condemned by four members of the Fredericton Tree Commission. The list, signed by the four members of the Commission is then forwarded to the office of the City Engineer.

Trees on private property which are condemned as possible breeding places for the Elm Bark Beetle, which carries the fungus of Dutch Elm Disease, are also removed by City crews. Following is a list of trees which were confirmed as Dutch Elm Disease trees:-

<u>Location</u>	<u>Number of Trees</u>
Ryan's Brick Yard (Woodstock Road)	2
25 Elmwood Court	2
247 Woodstock Road	1
247 Dundonald Street	1
Forest Hill - Beaverbrook Street	2
150 Lincoln Road	1
Lincoln Road (rear of Sutherland's Marina)	1
Lincoln Road (below C.D.A. Farm)	10
Wilsey Road	1
1391 Lincoln Road	1
1401 Lincoln Road	4
145 Ryan Court	1
875 Union Street	1
446 Gibson Street	1
475 Gibson Street	1
Total Removed	<u>30</u>

Following is a list of trees removed from 1961 to 1969 with Dutch Elm Disease:-

1961 .....	2
1962 .....	2
1963 .....	1
1964 .....	14
1965 .....	8
1966 .....	12
1967 .....	18
1968 .....	33
1969 .....	<u>30</u>
TOTAL .....	<u>120</u>

Permission for the removal of trees on private property, as well as a statement to the effect that no claim for damages will be filed by the property owner, are obtained before proceeding with this work.

The system is working very well, with a minimum of delay, after the tree has been condemned.

A considerable number of trees were pruned (1879) during the year as well as the usual planting program.

Spraying of Mountain Ash at various locations in the City of Fredericton was carried out in 1969 to keep down the defoliation of these trees due to Beetles.

Trees were planted at the following locations:-

<u>Location</u>	<u>Number of Trees</u>
Southampton Drive	68
Dover Crescent	26
Grandame Street	16
York Street	15
Lisgar Street	31
Massey Street	16
Willingdon Street	32
Stanley Street	5
Lynhaven Street	16
Eglinton Street	22
Studholm Street	7
Heather Terrace	16
Irvine Street	8
Sewell Street	4
Regent Street (Park)	16
Carleton Park	11
Fisher Field (McEvoy Street)	<u>11</u>
Total	<u>320</u>

42 trees were replaced in 1969 at various locations in the City due to loss through dry weather or vandalism.

11 trees are on hand for planting in the spring of 1970.

Under the above heading the following trees were purchased in 1969 from Lansdowne Nursery:-

99 Norway Maples 8' - 10' @ \$5.50 each .....	\$ 544.50
55 Crimson Maples 7' - 9' @ \$6.25 each .....	343.75
30 Schewedler Maples 7' - 9' @ \$6.25 each .....	187.50
5 Silver Maples 8' - 10' @ \$5.25 each .....	26.25
3 Red Maples 8' - 10' @ \$5.25 each .....	15.75
71 Tilia Cordata 8' - 10' @ \$6.00 each .....	426.00
60 Tilia Pallida 8' - 10' @ \$5.50 each .....	330.00
50 Populus Thevestine 8' - 10' @ \$3.90 each .....	<u>195.00</u>
TOTAL .....	\$ 2,068.75 <u>=====</u>

In 1965 the City of Fredericton purchased a Power-R-Stumper at a cost of \$5,746.16.

With the addition of this machine, 74 stumps were removed at various locations in the City at an expenditure of \$1640.60 and was made up as follows:-

Labor .....	\$ 1,195.49
Machinery charges .....	332.00
Material .....	<u>113.11</u>
TOTAL .....	\$ 1,640.60 <u>=====</u>

In 1967 Mr. David Urquhart was appointed Supervisor of Parks and Trees, responsible to the City Engineer. With this addition to staff, this branch is more efficiently operated, with beneficial results in the beautification of the Public Parks and Recreational Areas of the City as well as improved tree care.

#### BACK DRAIN DIVERSION:-

Expenditure .....\$ 940.68

The above expenditure is made up as follows:-

Labor .....	\$ 662.93
Hired Trucks .....	79.75
City Machinery .....	<u>198.00</u>
TOTAL .....	\$ 940.68 <u>=====</u>

The above expenditure was for general maintenance.

BACK DRAIN:-

Expenditure ..... \$ 333.99

The above expenditure is made up as follows:-

Labor .....	\$ 188.49
Hired Trucks .....	119.50
City Machinery .....	<u>26.00</u>
TOTAL .....	<u>\$ 333.99</u>

This expenditure was for general maintenance to the Back Drain.

SURVEYING:-

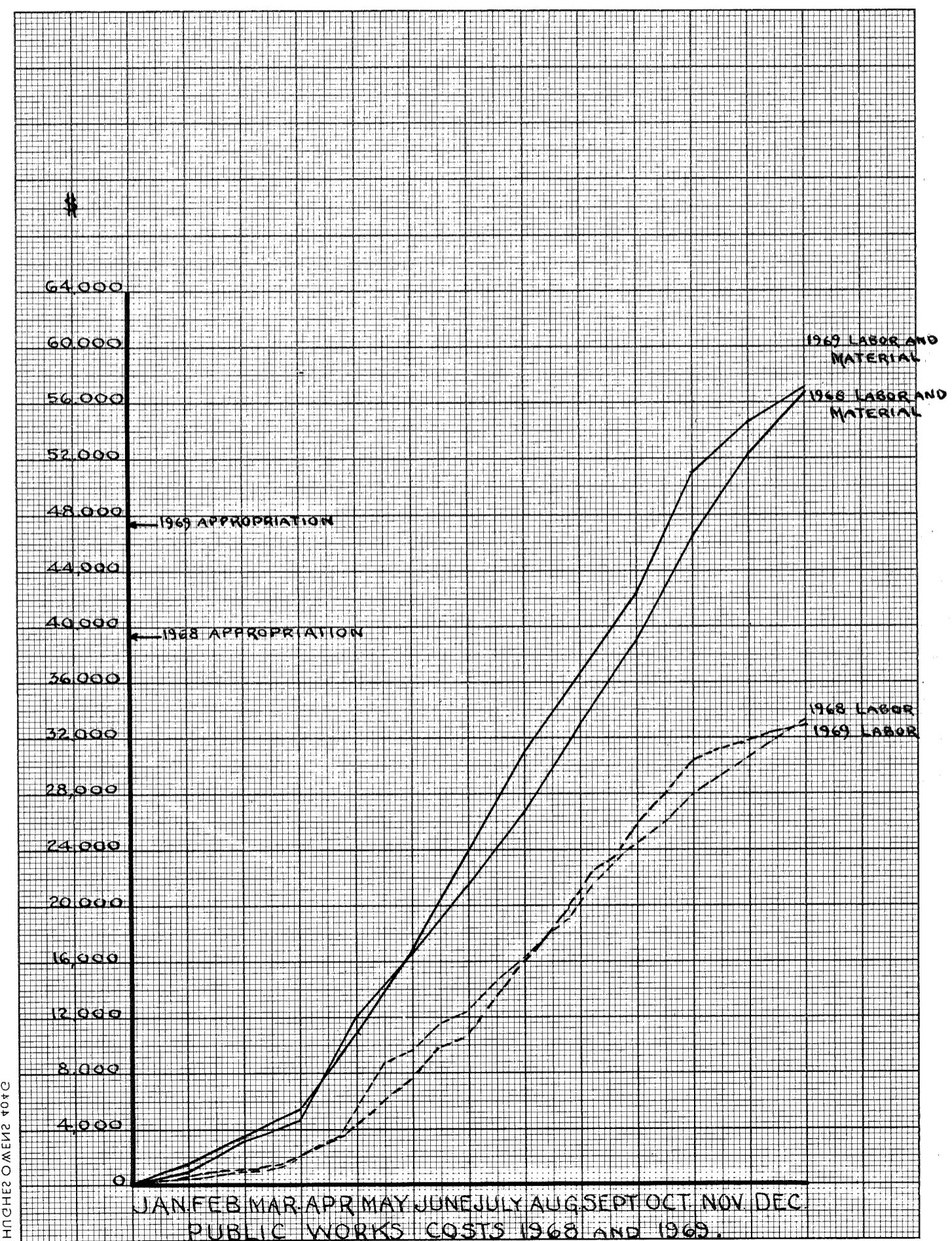
Under this heading expenditures amounted to \$1,184.84 made up as follows:-

Labor .....	\$ 851.65
City Machinery .....	28.00
Materials .....	<u>305.19</u>
TOTAL ....	<u>\$1,184.84</u>

The labor charge of \$851.65 was for helpers with the Engineers during the course of their work in 1969, on other than programmed projects.

The material cost of \$305.19 was made up as follows:-

J. S. Neill Wholesale (varnish, glue, number leads, sledge, axes, etc.) .....	\$ 69.61
Atlas Building Supplies (Lumber) .....	3.90
Eastwood Industries (replacement of scales on rods) .....	13.01
Canada Brass Ltd. (repairs to dipping needle) .....	34.55
Petty Cash (Postage, for dipping needle) .....	.65
Paul Burden (hand level #80-0099) .....	46.39
Trainor Surveys (Work on Graham Avenue and prints) .....	52.30
J. L. Simms (Plywood) .....	10.67
Elm Glass Ltd. (Enamel) .....	9.62
Provincial Artisans (stakes) .....	14.26
Kelvin Hughes (repairs to #7000 hand level) .....	13.63
E. M. Young Ltd. (Tapes, spray enamel, axes, number leads)	<u>36.60</u>
TOTAL .....	<u>\$ 305.19</u>



UNFORSEEN ACCOUNT - LABOR AND HIRED TRUCKS:-

Removal of Christmas Trees from City Streets .....	\$ 563.74
Marking Domestic Sewer Outlet, St. John River .....	56.44
Benches (Painting and repairs) .....	421.79
Spraying Swamp Areas .....	56.45
Armistice Stand .....	46.19
Sir James Dunn Fountain .....	126.59
Taking of Inventory 1969 .....	102.31
Greens (cutting, raking seeding, topsoiling, etc.) .....	<u>4,130.59</u>
TOTAL .....	\$ 5,504.10

The total expenditure amounted to \$13,740.70 and was made up as follows:-

Labor .....	\$ 5,363.60
Hired Trucks .....	140.50
City Machinery .....	798.00
Other Materials .....	<u>7,438.60</u>
TOTAL .....	\$ 13,740.70

CASUALS' VACATION PAY:-

The total amount under this heading amounted to \$5,265.55 for casual labor vacation pay.

ODELL PARK

Gross Expenditure .....	\$ 16,967.15
Credits .....	<u>130.66</u>
Net Expenditure .....	\$ 16,836.49

Included in the above are the following:-

- 1) Odell Park maintenance
- 2) Odell Park development

1) Odell Park Maintenance

Gross Expenditure .....	\$ 7,498.14
Credit .....	<u>76.66</u>
Net Expenditure .....	\$ 7,421.48

The above credit is made up as follows:-

Payment of Long Distance calls (J. Doherty) .....	\$ 34.66
Rental on Massey-Ferguson Tractor (Recreation Department)....	<u>42.00</u>
TOTAL .....	\$ 76.66

The Gross Expenditure of \$7,498.14 is made up  
as follows:-

Horsnell's Ltd. (repairing mower) .....	\$ 10.00
Atlas Building Supplies (paint) .....	12.57
Frank Blaney (repairing tractor) .....	40.52
H. S. Gill (lumber) .....	8.70
Royal Mills (20 bags lime) .....	16.00
Sumners Ltd. (1 motor mower) .....	89.06
J. S. Neill & Sons Ltd. (parts for mower, shears, staples, etc.) .....	124.49
Bud Wolfe Service Station (gasoline) .....	26.71
Hawkins Equipment and Rental (repairs to mower) .....	58.14
W. W. Thomas (217 yards topsoil @ \$1.55 per yard) .....	336.35
Battery and Electric (1 - 12 volt battery) .....	23.00
Joseph Nicholson (12 bales hay) .....	6.00
N. B. Telephone Co. .....	94.55
John Gibson & Son (Peat moss, seed, fertilizer, etc.) .....	62.33
Millar Motors (repairs to mower) .....	28.99
Minister of Finance (License for mower) .....	6.00
City of Fredericton (Water Rates) .....	40.50
Sutherland's Marina (repairs to chain saw) .....	2.30
Workmen's Compensation .....	90.00
Miles Tire Ltd. (Repair tire) .....	8.90
Journal Voucher (diesel fuel, gas) .....	27.26
Journal Voucher (Canada and City Pension) .....	260.57
Journal Voucher (City machinery) .....	334.50
Journal Voucher (Fertilizer, cement, crushed rock, topsoil) .....	64.93
Journal Voucher (City labor) .....	<u>5,725.77</u>
TOTAL .....	<u>\$7,498.14</u>

## 2) Odell Park Development

Gross Expenditure .....	\$ 9,469.01
Credit .....	<u>54.00</u>
Net Expenditure .....	<u>\$ 9,415.01</u>

The above credit is for sale of hardwood.

The gross expenditure amounting to \$9,469.01  
is made up as follows:-

Scotts Nursery (Bedding plants, tulip bulbs) .....	\$ 127.25
Haley Lumber Co. (Fencing) .....	32.08
Atlas Building Supplies (Cedar shingles, lumber) .....	10.37
John Gibson and Son (Grass Seed) .....	69.00
A. D. Neill (Rental on grass and grain spreader) .....	10.00
Wendall Thomas (196 yards topsoil) .....	303.80
H. S. Gill (Lumber) .....	139.67
J. S. Neill Wholesale (Wire fencing, staples, brushes, cord, etc.) .....	189.71
Atlantic Rentals (Rental on cement mixer) .....	10.80
Atlas Building Supplies (nails, tar paper, screws, hinges) ..	48.89
Journal Voucher (Canada and City Pension) .....	92.92
Journal Voucher (Materials, sand, pipe, rock dust) .....	108.68
Journal Voucher (Gas, oil, diesel fuel) .....	28.34
Journal Voucher (Machinery) .....	1,293.00
Journal Voucher (City labor) .....	<u>7,004.50</u>
TOTAL .....	<u>\$ 9,469.01</u>

Under this heading "Odell Park", trees were cut and pruned where necessary, flowers planted, underbrush cleared, trails constructed and the topsoiling, grading and seeding of the Athletic Field was completed.

In addition, animals, namely ducks and rabbits were added to the Park and the water course was altered creating a pond for the ducks and animal runs were constructed for the rabbits, making Odell Park a picturesque sight.

#### CARLETON PARK

Expenditure ..... \$ 6,201.42

The above expenditure is made up as follows:-

Scotts Nursery (Plants and Bulbs) .....	\$ 130.80
Herseys Esso Station (Gas, oil) .....	8.44
Hawkins Equipment Rentals (repairs to mower) .....	6.94
E. M. Young (Aluminum roofing) .....	14.44
H. S. Gill (Lumber) .....	34.98
J. L. Simms and Sons (underlay) .....	117.66
J. S. Neill Wholesale (Paint, brushes, padlocks, etc.) ...	58.28
Mr. Harry Smith (10 yards topsoil) .....	15.50
W. W. Thomas (7 yards topsoil) .....	10.85
Marathon Realty Co. (rental on Park) .....	700.00
Lansdowne Nursery (Flowering shrubs) .....	7.55
Atlas Building Supplies (roofing nails) .....	1.36
Capital Co-op Ltd. (40 bags fertilizer) .....	93.20
John Gibson & Son Ltd. (Seed, and rose dust) .....	16.54
Journal Voucher (15 tons rock dust) .....	37.50
Journal Voucher (Pension contribution) .....	178.04
Journal Voucher (Oil and gas) .....	4.20
Journal Voucher (City labor and hired machinery) .....	4,256.14
Journal Voucher (City machinery) .....	509.00
TOTAL .....	\$ 6,201.42

### WILMOT PARK

Expenditure ..... \$ 7,925.67

The expenditure of \$7,925.67 is made up as follows:-

Materials used on lawns and flower beds .....	\$ 401.22
Supplies and repairs to lawn mowers .....	42.34
Materials and labor charges expended on Caretaker's house..	214.68
Lighting, Wilmot Park (14-4' Fluorescent Lamps) .....	840.00
Sumners Ltd. (1-22' Moto Mower) .....	89.06
Stan Cassidy Ltd. (Electrical repairs to Band Stand.....)	7.00
Journal Voucher (Pension contributions) .....	194.32
Journal Voucher (City machinery) .....	701.50
Journal Voucher (City labor and hired machinery) .....	5,393.55
Journal Voucher (Water used in 1969) .....	30.00
Journal Voucher (Sewer rental) .....	<u>12.00</u>
TOTAL .....	\$ 7,925.67

### CITY YARD

Caretaker at City Yard, repair work in City Yard, heat, power, etc.

Expenditure.....\$ 11,414.96

The above expenditure is made up as follows:-

Labor .....	\$ 6,039.06
City Machinery .....	160.00
Light, Power and Telephone .....	1,038.35
Journal Voucher (Pension contributions)	335.44
Materials (Tools, lumber, etc.) .....	<u>3,842.11</u>
TOTAL .....	\$ 11,414.96

### DEVELOPMENT OF PARK AREAS

Gross Expenditure .....	\$ 15,546.04
Credits .....	<u>4,605.04</u>
Net Expenditure .....	\$ 10,941.00

The above credits are made up as follows:-

H. S. Gill (Payment for logs) .....	\$ 2,502.24
J. D. Irving (sale of pulp) .....	1,578.14
Pat Nealis (payment for pulp) .....	220.00
W. R. Thomas (purchase of pulpwood) .....	44.00
Journal Voucher (re credit on 12" pipe) .....	9.06
Journal Voucher (cedar posts) .....	229.60
Credit re sale of hardwood .....	<u>22.00</u>
TOTAL .....	<u>\$ 4,605.04</u>

For the above expenditure pedestrian walks were constructed in Skyline Acres subdivision, Stanley Street to York Street and from Massey Street south to Tiny Tot playground, at the rear of the lots facing Massey Street. Crusher dust was applied to the paths, and topsoil added.

A new Tiny Tot Playground was constructed this year, situated east of lots fronting on Dover Crescent and west of lots fronting on Liverpool Street.

In addition topsoil was added to the Tiny Tot Playground situated on Irvine Street near the Town of Marysville line.

#### RECREATION

Expenditure ..... \$ 6,601.13

The above expenditure does not include all playground expenditures, but only those which appear on department payrolls or costs of materials ordered through the office of the City Engineer. The salaries of the Recreation Director and Playground Supervisors hired for the summer months are not in the above costs, nor does the cost of equipment on the playgrounds appear here.

The expenditure of \$6,601.13 is made up as follows:-

Wendall Thomas (21 yards topsoil) .....	\$ 32.55
Harry Smith (136 yards topsoil) .....	210.80
Diamond Construction Co. (1961) Ltd. (148.4 tons rock dust) .....	371.00
J. S. Neill Wholesale (paint) .....	22.03
Forbes and Sloat (650.10 tons Class "A" gravel) .....	1,072.67
Journal Voucher (Coliseum Yard Light) .....	216.00
Journal Voucher (Materials used on Water service to Playground, Massey Street) .....	318.58
Journal Voucher (Gas and Oil) .....	233.36
Journal Voucher (Cement, rock dust, fertilizer, cedar posts, etc.) .....	<u>287.59</u>
Forward .....	\$ 2,764.58

	Carried Forward.....	\$ 2,764.58
Journal Voucher (Pension contributions) .....	63.20	
Journal Voucher (City Machinery) .....	864.00	
Journal Voucher (City labor and hired machinery) .....	1,409.35	
Journal Voucher (Water used in various pools) .....	<u>1,500.00</u>	
TOTAL .....	\$ 6,601.13	

### SIGN DEPARTMENT

Purchasing, repairing and installing street signs on City Streets.

The expenditure under this heading amounted to \$4,661.98 made up as follows:-

Labor .....	\$ 2,201.51
City Machinery .....	16.00
Journal Voucher (Pension contributions) .....	120.13
Materials .....	<u>3,281.33</u> 5,618.97

Less Credits:-

4 Decals, Police Dept. ...	\$ 19.50
Credit re sign work .....	900.00
Co-op Insurance Services (damage to car) ....	29.84
J. Walter Co. (cheque for duplicate payment)...	<u>7.65</u> 956.99
TOTAL ....	\$ 4,661.98

### CITY HALL

Expenditure .....\$ 344.77

The above is, of course, only the expenditure for the City Hall made through the office of the City Engineer and is not the total expenditure made on City Hall.

The expenditure of \$344.77 is made up as follows:-

Journal Voucher (Pension contributions) .....	\$ 15.20
Journal Voucher (City machinery) .....	6.00
Journal Voucher (City labor) .....	<u>323.57</u>
TOTAL .....	\$ 344.77

### SURFACE SEWERS

Gross Expenditure .....	\$ 22,618.39
Credits .....	<u>735.86</u>
Net Expenditure .....	\$ 21,882.53

The above credits are made up as follows:-

Richards Electric (Thawing conduit primary school) .....	\$ 44.49
Forest Hill Cemetery (Digging graves) .....	105.10
Canada Permanent Mortgage Co. (Digging grave) .....	45.78
Fredericton Medical Clinic (cleaning surface drain) .....	14.28
New Brunswick Dept. Public Works (thawing catch basin at Centennial Building) .....	222.50
Seven-Up Sussex Ginger Ale (thawing catch basin).....	83.08
Texaco Canada Ltd. (repairs to floor drain) .....	49.04
Wilmot Downs (labor installing surface sewer) .....	88.17
Journal Voucher (return of Gully Grate).....	46.94
Journal Voucher (24' - 8" T. C. Pipe) .....	<u>36.48</u>
TOTAL .....	\$ 735.86

The Surface Sewers in the City were flushed where necessary and all Catch Basins were cleaned and repaired during the year and repairs were made to any leaks that occurred or extensions required for the sewer outfalls, amounting to \$21,882.53, made up as follows:-

Labor .....	\$ 11,357.46
Hired Trucks and Machinery .....	1,690.00
City Machinery charges .....	3,966.50
Materials .....	<u>4,868.57</u>
TOTAL .....	\$ 21,882.53

There are in Fredericton 52.38 miles of Surface Sewer, consisting of 6.43 miles on the north side of the Saint John River and 45.95 miles on the south side of the Saint John River.

### DOMESTIC SEWER

Labor Cost .....	\$ 20,404.10
Hired Trucks and Machinery .....	282.90
City Machinery Cost .....	8,300.50
Material Cost .....	<u>13,579.91</u>
Gross Expenditure .....	\$ 42,567.41
Credits .....	<u>20,469.81</u>
Net Expenditure .....	\$ 22,097.60

The credit of \$20,469.81 is made up as follows:-

Material, labor and machinery supplied for house	
connections .....	\$ 19,715.77
Work done for private parties (cleaning floor drains) .....	67.37
Village of Barker's Pt. (sale of 6 Manhole Cover Cushions) .....	9.00
Blighty Fish and Chips (thawing sewer) .....	170.17
Texaco Canada Ltd. (repairs to floor drain) .....	14.11
W. J. Bearisto Co. Ltd. (20' - 4" A. C. Pipe) .....	9.00
DeSourdy Construction Ltd. (repairs) .....	89.84
Fred J. Wilkins (5' - 8" T. C. Pipe and 1 - 8" x 5"	
T. C. Tee) .....	12.00
Journal Voucher (Sewer rental 1969, Fire Department) .....	150.00
Journal Voucher (6" Pipe - 1-6" Bend) .....	220.55
Journal Voucher (Sewer rental 1969, Wilmot Park) .....	<u>12.00</u>
TOTAL .....	\$ 20,469.81

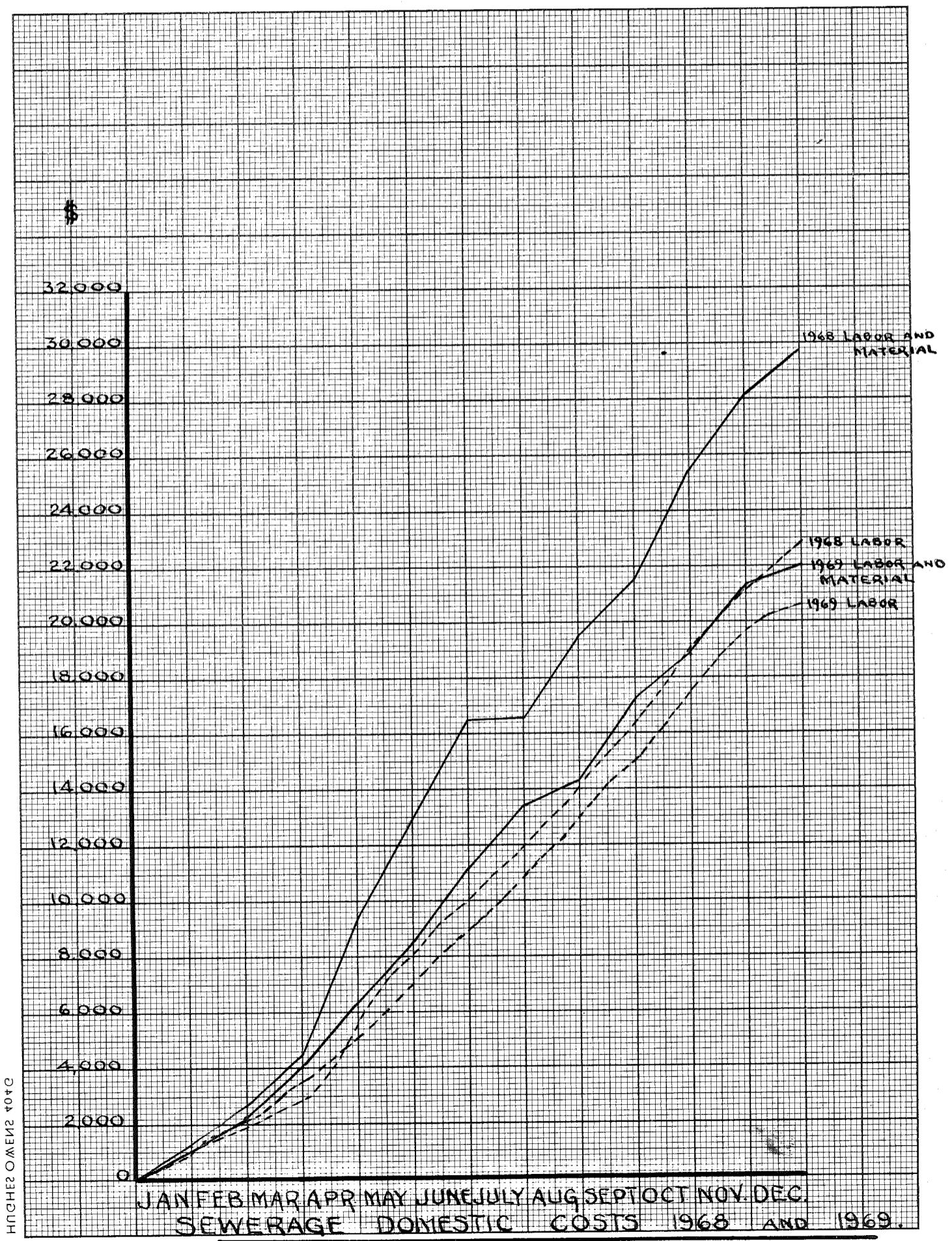
New customers connected to the City Sewer system in 1969 totalled 139.

All Sewer Mains were cleaned and flushed in 1969.

The Fredericton Pollution Control Commission was formed in 1968 and work commenced on Pollution Control of Sewerage for the Fredericton Area, including Nashwaaksis, Marysville and Barker's Point. This system will be in operation in 1970.

The Fredericton Domestic Sewer System consists of 66.75 miles (12.59 in Carleton Ward and 54.16 miles in the City property) of Sewer Mains and are made up as follows:-

36' Armco Pipe .....	0.05 miles
36" Concrete Pipe .....	0.84 miles
30" Concrete Pipe .....	0.20 miles
18" Concrete Pipe .....	.32 miles
24" Terra Cotta Pipe .....	0.54 miles
18" Terra Cotta Pipe .....	1.29 miles
15" Terra Cotta Pipe .....	1.63 miles
12" Terra Cotta Pipe .....	6.27 miles
10" Terra Cotta Pipe .....	.92 miles
8" Terra Cotta Pipe .....	35.38 miles
12" Transite Pipe .....	.64 miles
12" Corrugated Iron Pipe ...	0.07 miles
10" Transite Pipe .....	1.66 miles
8" Transite Pipe .....	16.34 miles
8" Cast Iron Pipe .....	0.04 miles
6" Transite Pipe .....	0.02 miles
6" C. I. Force Main .....	<u>0.54</u> miles
TOTAL ....	66.75 miles



### OLD BURIAL GROUND

The old burial ground between Brunswick and George Streets was kept in good condition in 1969.

The tombstones that could be repaired and were not too seriously damaged by vandals, were replaced.

The grass was kept mowed and sodding and seeding was done where necessary.

Gross Expenditure.....	\$ 3,672.24
Credit .....	<u>325.89</u>
Net Expenditure .....	\$ 3,346.35

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The above credit was interest on Trust Fund and Bonds.

The expenditures on the Old Burial Ground were as follows:-

New Brunswick Power Commission (6 Fluorescent lights).....	\$ 450.00
H. S. Gill (Cedar posts) .....	12.33
Hawkins Equipment and Rental (repairs to mower) .....	124.81
Bud Wolfe Service Station (Gas) .....	11.13
J. S. Neill Wholesale (grass shears) .....	4.14
Co-op Hardware (wheelbarrow) .....	34.02
Journal Voucher (gas and oil) .....	11.32
Journal Voucher (fertilizer, cement) .....	26.22
Journal Voucher (pension contribution) .....	51.17
Journal Voucher (city labor) .....	2,853.10
Journal Voucher (hired machinery) .....	8.00
Journal Voucher (City machinery) .....	<u>86.00</u>
TOTAL .....	\$ 3,672.24

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### FIRE DEPARTMENT

Expenditure .....\$ 75,311.21

Journal Voucher (2839.50 gallons) .....	\$ 653.09
Journal Voucher (523 hydrants and 72 sprinklers rental) ..	71,400.00
Journal Voucher (pension contribution) .....	12.49
Journal Voucher (cement, pipe, sand, crushed rock) .....	25.07
Journal Voucher (mobile radios) .....	2,381.73
Journal Voucher (City machinery) .....	85.00
Journal Voucher (City labor) .....	303.83
Journal Voucher (Sewer rental 1969) .....	150.00
Journal Voucher (Water consumption 1969) .....	<u>300.00</u>
TOTAL .....	\$ 75,311.21

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CEMENT WALKS

Expenditure ..... \$ 27,878.65

For the above expenditure, concrete sidewalks were laid at the following locations:-

<u>Location</u>	<u>Lineal Feet</u>
Smythe Street, Lynhaven to Eglinton (east side) .....	330
Smythe Street, Lynhaven to Montgomery (east side) .....	698
Smythe Street, Beechwood Crescent to Prospect St. (west side) .....	1,755
Prospect St., Smythe towards Hanwell Road (north side) .....	1,164
Highland Avenue, Portions not completed in 1963 (west side) .....	239
Churchill Row, Church St. to existing, near St. John Street (north side) .....	562
McNair Drive, Wilsey Road to Limerick Road (west side) .....	1,586
Limerick Road, Hearne St. to McNair Drive (west side) .....	968
Hearne Street, McNair Drive to Limerick Road (south side) .....	245
Canterbury Drive, Cambridge Crescent to Topcliffe Crescent (north side) .....	1,063
Willingdon Street, portion from Massey Street west, (west side) .....	628
Topcliffe Crescent (west side) .....	2,046
McEvoy Street, Noble St. to MacLaren Avenue (east side) .....	505
TOTAL .....	<u>11,789</u>

The cost of the above sidewalk is apportioned one-half to the City and one-half to the property owner, except where Local Improvement agreements are in effect with the subdividers.

The concrete for the above construction of sidewalks was obtained from Elmtree Concrete Ltd. at \$14.10 per cubic yard.

The property owner was charged \$1.30 per lineal foot of sidewalk.

The actual cost for laying one lineal foot of sidewalk was \$2.78 which includes Compensation, Pension and Holiday Fund.

### REPAIRS TO CONCRETE SIDEWALKS

Gross Expenditure .....	\$ 13,217.49
Credit.....	<u>813.25</u>
Net Expenditure .....	\$ 12,404.24

The above credit was for repairs to walks for private parties.

Under this heading deteriorated concrete sidewalks were replaced at various locations in the City.

### SANITATION

Gross Expenditure .....	\$ 157,614.06
Credit .....	<u>246.32</u>
Net Expenditure .....	\$ 157,367.74

The above credit is made up as follows:-

Gordon Concrete (service to Gordon Concrete) .....	\$ 37.86
J. S. Neill Wholesale (partial credit on brooms and shovels)	.96
Cherry's Travel Service (charge re Duder Invoice) .....	2.00
Journal Voucher (Rental on Flusher) .....	200.00
Journal Voucher (1 bag Calcium Chloride) .....	<u>5.50</u>
TOTAL .....	\$ 246.32

Under the heading "Sanitation" the following projects are included:-

- 1) Garbage Collection
- 2) Sanitary Land Fill
- 3) Street Cleaning (including Dust Control)

#### 1) Garbage Collection:-

The Garbage Collection was operated by Blizzard's Trucking Service Ltd. The amount paid for the above operation was \$63,992.70 in 1969.

#### 2) Sanitary Land Fill:-

Expenditure .....\$ 16,867.67

The above expenditure is made up as follows:-

Daily Gleaner (Advertisement for Garbage Collection) .....	\$ 40.04
Raymond Savage (Padlock and Keys) .....	5.56
Forbes and Sloat (1211.0 tons Class "C" gravel @ \$1.45 per ton) .....	1,755.95
J. S. Neill & Sons (Padlock and Keys) .....	6.59
J. S. Neill Wholesale (Pipe for gate) .....	10.63
Journal Voucher (City machinery) .....	1,123.00
Journal Voucher (Pension contribution) .....	63.46
Journal Voucher (City labor) .....	1,396.27
Journal Voucher (Hired machinery) .....	41.25
Shiretown Construction Company .....	<u>12,424.92</u>
TOTAL .....	\$ 16,867.67

In 1966 a five year contract for bulldozing services at the Sanitary Land Fill was awarded to Shiretown Construction Company at a cost of \$12,424.92.

### 3) Street Cleaning:-

Gross Expenditure .....	\$ 76,753.42
Credits .....	<u>246.32</u>
Net Expenditure .....	\$ 76,507.10

The Gross Expenditure is made up as follows:-

Labor .....	\$ 51,208.23
Hired Trucks and Machinery .....	6,700.50
City Machinery .....	4,666.00
Materials .....	<u>14,178.69</u>
TOTAL .....	\$ 76,753.42

City Machinery and Material charges amounted to \$18,844.69 and are made up as follows:-

Purchase of cans, hand brooms, shovels, rakes, forks, scrapers, repairs to carts, etc. .....	\$ 1,883.23
Main Broom Wire .....	1,799.84
Gutter Broom Wire .....	645.84
Labor and repair charges on Street Sweeper .....	1,599.28
Labor and repair charges on Sicard Flusher .....	656.37
Gas and Oil: 5812.50 gallons gas .....	\$ 1,337.51
284.5 quarts oil .....	99.58
6½ gallons antifreeze.....	<u>15.92</u>
Barker Equipment Ltd. (rental on Sweeper) .....	1,453.01
Repairs to Ford (Oil truck) .....	972.00
Minister of Finance (License on Sweeper and Flusher) .....	119.16
Sansom Equipment (Hoses) .....	12.00
Sanfax Industries (45 gallons Sanfax) .....	425.54
Carleton Safety Supplies (24 Exp. Rings for hose) .....	292.46
Irving Oil Co. Ltd. (500 gallons Diesel fuel) .....	18.92
Imperial Oil Ltd. (19,534 gallons road oil) .....	73.75
J. S. Neill Wholesale (12 bags Calcium Chloride) .....	2,222.06
Journal Voucher (Labor charged incorrectly) .....	64.54
Journal Voucher (City machinery) .....	15.68
Journal Voucher (Pension contribution) .....	4,666.00
Journal Voucher (Hired machinery) .....	1,791.77
Miscellaneous (Car allowance and printing) .....	<u>133.24</u>
TOTAL .....	\$ 18,844.69

The Wayne Sweeper (purchased in 1968) worked 1346 hours. The actual cost for cleaning streets with this machine was \$8,293.95 and was calculated as follows:-

Labor and repairs on Sweeper .....	\$ 1,599.28
Main Brooms .....	1,799.84
Gutter Broom Wire .....	645.84
Gasoline (1881.20 gallons) .....	432.68
Oil (97½ quarts - 1 quart Hydraulic Oil) .....	35.00
Antifreeze (3½ gallons) .....	8.58
Water (457,600 gallons) .....	220.40
Insurance on 1969 Wayne Sweeper .....	74.00
Labor (including Workmen's Compensation, Holiday and Pension Fund - Operators) .....	<u>3,478.33</u>
TOTAL .....	<u>\$ 8,293.95</u>

The operating dates for the above machine (Sweeper) were from March 14, 1969 to November 13, 1969.

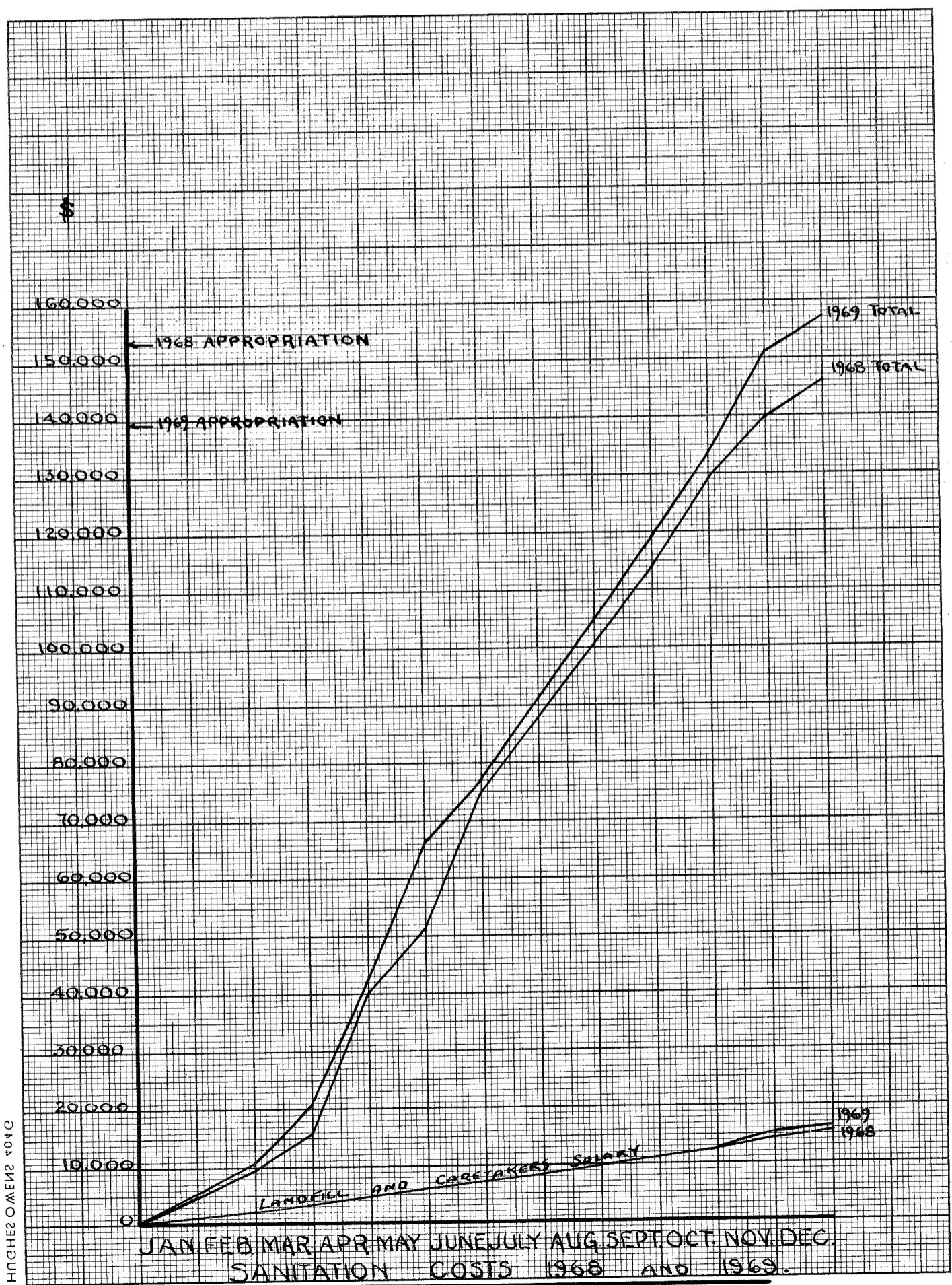
In 1955 the City of Fredericton purchased a Sicard Master Flusher with a capacity of 2,250 Imperial Gallons. The price of this machine was \$19,435.00 and was paid for in 1956. The operating dates for this machine (Flusher) were from April 11, 1969 to November 7, 1969.

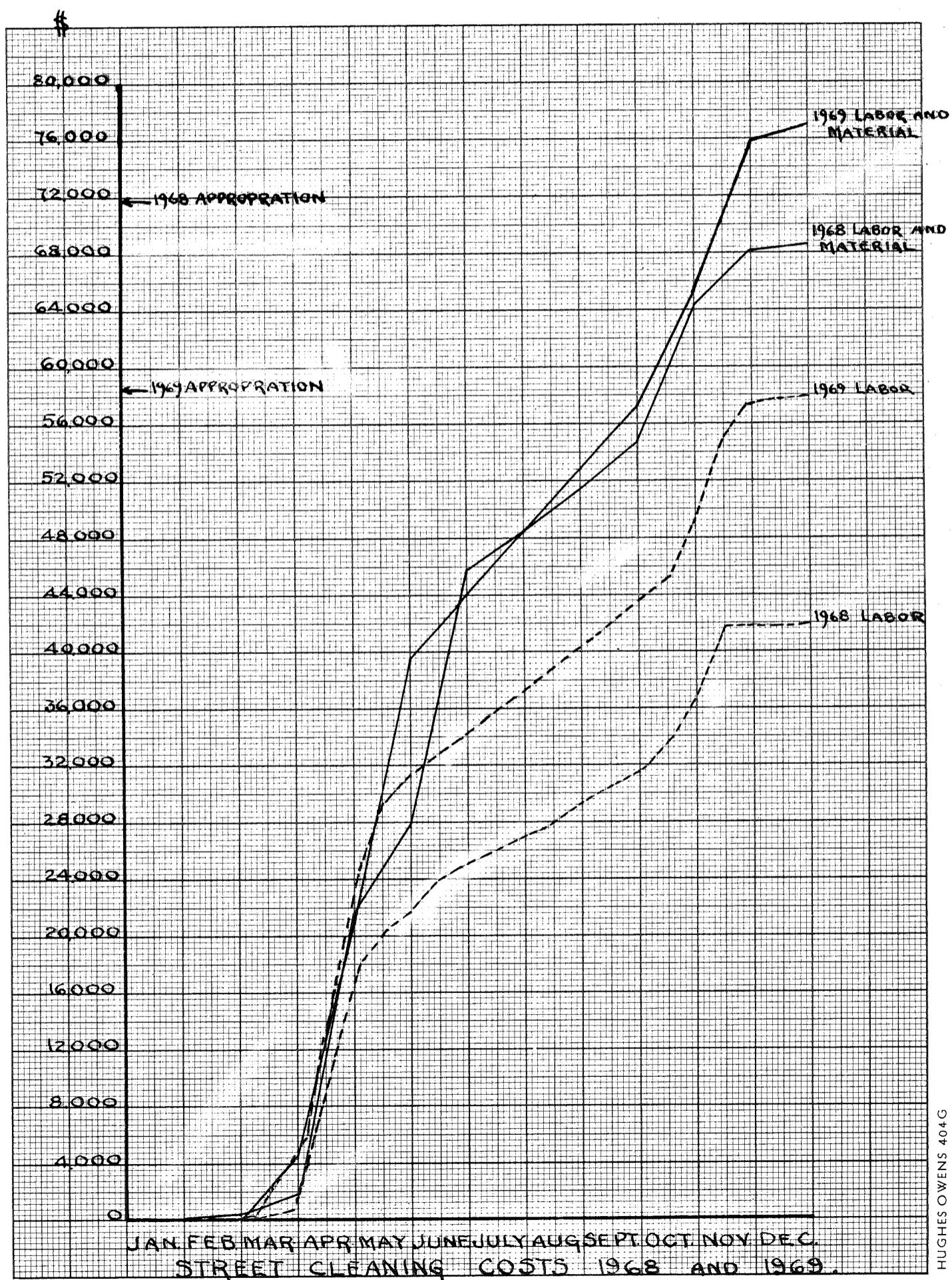
The Flusher worked 993½ hours. The actual cost for flushing streets with this machine was \$6,213.67 and was computed as follows:-

Labor and repairs to Flusher .....	\$ 656.37
Gasoline (3412.1 gallons) .....	784.78
Oil (154 quarts) .....	53.90
Antifreeze (3 gallons) .....	7.35
Water (4,470,000 gallons) .....	2,026.25
Insurance on Flusher .....	59.00
Labor (including Workmen's Compensation, Holiday and Pension Fund - Operator) .....	<u>2,626.02</u>
TOTAL .....	<u>\$ 6,213.67</u>

In 1969 the item "Dust Control" was taken out of Roads and Streets Account and put under the heading "Street Cleaning."

In 1969, 20,034 gallons of oil was used for dust control.





The following is a list of machinery used in the Sanitation Department together with the repair costs for 1968 and 1969, including tires and tubes.

<u>Name of Machine</u>	<u>Year Purchased</u>	<u>Repairs 1968</u>	<u>Repairs 1969</u>
Elgin Street Sweeper (traded in 1968)	1960	\$ 688.44	-----
Wayne Street Sweeper	1968	-----	1,599.28
Sicard Flusher (2250 I.G.)	1955	2,034.02	656.37
Ford (1947)	-----	-----	119.16
TOTALS .....		\$ 2,722.46	\$ 2,374.81

#### LOYALIST BURIAL GROUND

On the recommendation of the Park Committee of the Fredericton Town Planning Commission, the Loyalist Cemetery on the "Flats" adjacent to the back lots in Elmcroft Place was improved in 1958.

In 1969 the upkeep expenditure amounted to \$73.49 made up as follows:-

Labor .....	\$ 44.39
Hired Trucks and Machinery .....	<u>30.00</u>
TOTAL .....	\$ 74.39

This area continues to be of historic interest and is also a tourist attraction with pedestrian traffic only from the Little League Ball Field on the "Flats" to the site.

ADMINISTRATION OF JUSTICE

Expenditure .....\$ 3,609.42

The above expenditure of \$3,609.42 is made up  
as follows:-

Journal Voucher (7,542.50 gallons gasoline) .....	\$ 1,734.78
Journal Voucher (53 quarts oil) .....	18.55
Journal Voucher (15 gallons Diesel Fuel) .....	2.70
Journal Voucher (½ gallon Antifreeze) .....	1.23
Journal Voucher (Mobile Radios) .....	1,618.23
Journal Voucher (Pension contributions) .....	2.14
Journal Voucher (City machinery) .....	4.00
Journal Voucher (City labor) .....	162.19
Journal Voucher (Decals, cement, sand, rock dust) .....	<u>65.60</u>
TOTAL .....	\$ 3,609.42

J. T. CLARK MEMORIAL BUILDING

Expenditure .....\$ 3.47

The above expenditure was for labor and a bag  
of salt for de-icing the walk into the building.

CONTINGENT

Expenditure .....\$ 78.46

The above expenditure is made up as follows:-

Labor .....	\$ 59.82
City Machinery .....	16.00
Pension Fund .....	<u>2.64</u>
TOTAL .....	\$ 78.46

### MUNICIPAL PARKING LOT - CAMPBELL STREET

In 1966 the City Council authorized the changing of the free parking area in order to give better parking facilities to the shopping public.

In 1969 the expenditure for the above amounted to \$2,045.98 and was made up as follows:-

Stan Cassidy (checking, repairing gate and wiring building) .....	\$ 577.40
Cameron Grant Inc. (postage on 2 coin rejectors) .....	.80
Jardine Renovations (supply and place hut) .....	535.75
Dept. of Highway (Provincial Government signs) .....	240.00
Horsnell's Ltd. (repairs to hinge on door) .....	8.31
Atlas Building Supplies (Styrofoam) .....	6.22
H. S. Gill (Lumber) .....	14.18
Elm Glass Ltd. (Paint and brushes) .....	23.80
Paul Burden Ltd. (Repair time clock and cash box) .....	34.43
Capital Free Press (Printing parking tickets) .....	54.43
J. L. Simms (Masonite, bolts and paint) .....	9.80
C. W. Hall (Book for recording revenue, stapler and staples) .....	7.78
Journal Voucher (Pension contributions) .....	16.49
Raymond Savage (making of keys) .....	1.20
Journal Voucher (City machinery) .....	104.50
Journal Voucher (City labor) .....	<u>420.89</u>
Gross Expenditure .....	\$ 2,055.98

Less Credit:

Byron E. Evans (repairs to Fence) .....	<u>10.00</u>
NET EXPENDITURE .....	\$ 2,045.98

For a short period in 1969 the coin activated gate regulating this parking area was dispensed with and a building was supplied by Jardine Renovations Ltd. on this site, wired by Stan Cassidy and put in charge of a collector (Corps Commissioner). This arrangement did not prove satisfactory and the coin activated gate was again put back in operation.

### TOURIST AND INDUSTRY

Expenditure .....\$ 96.38

The above expenditure was for replacing bulbs, labor and lighting of two signs supplied by the "Tourist and Industrial Committee"; one placed at the junction of Woodstock Road and Golf Club Road, the other on the Lincoln Road.

The expenditure of \$96.38 is made up as follows:-

Maritime Electric and N.B.E.P.C. (Light Bill) .....	\$ 68.30
J. S. Neill Wholesale (12-150 Watt Bulbs) .....	3.52
Richards Electric (3-150 Watt Pyrex Bulbs) .....	9.56
Mrs. Bessie Wilby (rental on Lincoln Road Sign) .....	<u>15.00</u>
TOTAL .....	\$ 96.38

#### YORK ARENA

The expenditure under this heading was for the purchase of 24 gallons Varsol at a cost of \$12.00.

#### INDUSTRIAL DEVELOPMENT

Expenditure .....\$ 101.30

The above expenditure was made up as follows:-

Seaboard Surveys - Survey lot P-27 Industrial Area .....	\$ 72.70
Seaboard Surveys - Survey lot P22-A Industrial Area .....	<u>28.60</u>
TOTAL .....	\$ 101.30

#### BRUNSWICK STREET PARKING LOT

In 1958 the City of Fredericton constructed a Parking Area on the north side of Brunswick Street, between York Street and Carleton Street, just east of J. Clark and Sons property (T. Eaton Co.).

In February 1967, Food City Limited (Sobeys) acquired the above property from T. Eaton Co. thus cancelling the Brunswick Street Parking Lot operated by the City of Fredericton.

In 1969 the City of Fredericton purchased property in this Area including the above Parking Area from Food City Limited (Sobeys). This area was enlarged, graded and gravelled and cedar posts erected where necessary.

Expenditure .....\$ 1,060.56

The above expenditure is made up as follows:-

Labor .....	\$ 282.55
Hired Trucks and Machinery	22.00
City Machinery .....	256.00
Materials .....	<u>500.01</u>
TOTAL .....	\$ 1,060.56

The material charge of \$500.01 is made up as follows:-

Forbes and Sloat Ltd. (194.10 tons Gravel, Class "A" @ \$1.65 per ton) .....	\$ 320.26
Journal Voucher (Pension contributions) .....	11.25
N.B.E.P.C. (Parking Lot Lights) .....	48.75
Journal Voucher (Cement, sand, cedar posts) .....	110.75
N.B.E.P.C. (Light for Caretaker's Building) .....	<u>9.00</u>
TOTAL .....	\$ 500.01

#### ARCTIC RINK SITE PARKING LOT

In 1969 the free Parking Area situated on the south side of Campbell Street, just east of Carleton Street was made a metered parking site by the installation of Parking Meters.

Expenditure .....\$ 7,672.30

The above expenditure is made up as follows:-

J. S. Neill & Sons (1 Mop) .....	\$ 4.00
J. W. Bird and Co. Ltd. (Pitch emulsion) .....	12.69
J. J. MacKay Canada Ltd. (14 Meter Yokes with nuts and plugs)	141.40
J. J. MacKay Canada Ltd. (69 Parking Meters, 69 Coin Boxes)	6,519.81
Canadian National Railway (Freight on 2 Yokes) .....	4.15
Auto Machinery (50 - 1/2 Nuts) .....	1.76
C. W. Hall (1 Box Rubber Bands) .....	.97
Horsnell's Ltd. (Meter Posts and Extensions) .....	554.89
Journal Voucher (cement, sand, rock dust) .....	22.50
Journal Voucher (Pension contributions) .....	8.13
Journal Voucher (City machinery) .....	188.00
Journal Voucher (City labor) .....	<u>214.00</u>
TOTAL .....	\$ 7,672.30

## STREET LIGHTS

Previous to 1969 the City of Fredericton obtained its electric power from the Maritime Electric Co. On January 1, 1969 the Maritime Electric Co. was taken over by the New Brunswick Electric Power Commission.

The City Street Lighting System, on December 31, 1969 consisted of:-

- 1 - A Series Lighting System on the south side of the Saint John River;
- 2 - A Multiple Lighting System on the south side of the Saint John River;
- 3 - A Multiple Lighting System in the C.N.R. Subway;
- 4 - A Series Lighting System in Carleton Ward;
- 5 - A Multiple Lighting System in Carleton Ward.

### System #1

The Series Lighting System (south side) consists of some 18.48 miles of line and 70 lamps. This system is divided into two circuits; one of which is controlled by a 25 K.W. constant current transformer, the other by a 15 K.W. constant current transformer. One of these transformers along with the main switchboard, is housed in a building on Carleton Street, south of Needham Street. The second transformer is on a pole situated on Regent Street, between King's College Road and Albert Street and controls the circuit for Maryland Heights.

The two circuits are made up as follows:-

<u>Upper Rear Circuit</u>	<u>Load</u>	<u>Transformer Size</u>
6 - 250 C.P. Lamps @ .160 demand	.96	
12 - Fluorescent Lamps @ .50 demand	<u>6.00</u>	
	<u>6.96</u>	25 K.W.

### Maryland Heights

33 - 250 C.P. Lamps @ .160 demand	5.28
10-600 C.P. Lamps @ .350 demand	3.50
9-Fluorescent Lamps @ .50 demand	<u>4.50</u>
	<u>13.28</u>

15 K.W.

### System #2 and #5

The Multiple Lighting System as of December 31, 1969 was as follows:

252-500 Watt Incandescent Units @ \$52.00 per light per year  
144-200 Watt Incandescent Units @ \$28.00 per light per year  
358-250 Mercury Vapor Units @ \$54.00 per light per year  
186-400 Mercury Vapor Units @ \$68.00 per light per year  
186-4' Fluorescent Units @ \$60.00 per light per year  
64-6' Fluorescent Units @ \$75.00 per light per year

Each of the units excepting the Fluorescents consists of either a 500, 400 Mercury, 250 Mercury or 200 Watt 150 Volt Lamp, set in a nouvalex luminar fixture and hung on a bracket attached to the pole. These units are controlled by a control switch, which is energized by the Series Lighting System. The System was installed by the Maritime Electric Co. and is now maintained by the New Brunswick Electric Power Commission; the City pays the Commission \$52.00 per year for each 500 Watt Unit; \$28.00 per year for each 200 Watt Unit; \$68.00 per year for each 400 Mercury Vapor Lamp; \$54.00 per year for each 250 Mercury Vapor Lamp; \$60.00 per year for each 4' Fluorescent Lamp and \$75.00 per year for each 6' Fluorescent Lamp.

#### System #3

System #3 consists of 4 Multiple Lights, each of 150 Watt strength, located in the C.N.R. subway. This system is also controlled by a control switch which is energized by the Series Lighting System.

#### System #4

System #4 is a Series Lighting System (north side) which had formerly been installed in the Town of Devon and consists of 8.59 miles of line and 149 lamps. The system originally comprised three circuits but in 1960 a new circuit was added due to the change from 2500 Lumen Series Lamps. The three former circuits are controlled by three 15 K.W. constant current transformers, located on a pole platform on Pine Street, while the new circuit is controlled by a 15 K.W. constant current transformer situated on a pole on the Road leading from MacLaren Avenue to the Carleton Ward School.

The four circuits comprise the following:-

- |                         |   |
|-------------------------|---|
| Carleton Ward (Up)      | - mainly from Hughes Street west;   |
| Carleton Ward (Central) | - mainly between Hughes Street and Pine Street, including Dobie subdivision;  |
| Carleton Ward (Down)    | - Pine Street east to Gibson Street and between the Canadian Pacific Railway tracks and Union Street;               |
| Carleton Ward (Rear)    | - including Gibson Street from Devon Avenue to the City line and the easterly extremities of the Dobie subdivision. |

<u>Carleton Ward (Up)</u>	<u>Load</u>	<u>Transformer Size</u>
3 - 600 C.P.Lamps @ .350 demand	1.05	
33 - 250 C.P.Lamps @ .160 demand	5.28	
15-Fluorescent Lamps @ .50 demand	7.50	
	<u>13.83</u>	15 K.W.
<u>Carleton Ward (Central)</u>		
36-250 C.P. Lamps @ .160 demand	5.76	
12 - Fluorescent Lamps @ .50 demand	6.00	
	<u>11.76</u>	15 K.W.
<u>Carleton Ward (Down)</u>		
1 - 600 C.P.Lamp @ .350 demand	.35	
13-250 C.P.Lamps @ .160 demand	2.08	
3-Fluorescent Lamps @ .50 demand	1.50	
	<u>3.93</u>	15 K.W.
<u>Carleton Ward (Rear)</u>		
1 - 600 C.P.Lamp @ .350 demand	.35	
11 - 250 C.P.Lamps @ .160 demand	1.76	
21 - Fluorescent Lamps @ .50 demand	<u>10.50</u>	
	<u>12.61</u>	15 K.W.

All materials such as wire, pole fixtures, lamps, lamp fixtures, transformers, etc. are paid for by the City, installed by the New Brunswick Electric Power Commission under their contract price for maintenance. Any new installations that require an enlargement of circuits must be paid for by the City of Fredericton, including labor and material.

The Street Light costs for the year 1969 are as follows:-

Expenditure .....	\$ 72,591.54
1969 Appropriation ...	<u>82,305.00</u>
Credit ...\$	<u>9,713.46</u>

The Street Lighting expenditure of \$72,591.54 is made up as follows:-

#### Bulb Replacements

48 - 600 C.P. Series Lamps .....	\$ 59.32 )
360 - 250 C. P. Series Lamps .....	296.10 )

#### Power Costs for Subway and Series

Lighting December 31, 1968 to December 31, 1969 .....	4,587.63 )
--	------------

Maintenance and Contract of Pole Lines .....	45.12 )
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<u>Maintenance of Lamp Fixtures</u> , including such articles as lamp standards, lamp brackets, heads, sockets, shades, cut-outs, line switches, etc. ....	\$ 164.75	Series Lighting )
<u>Light Bill - Fredericton Highway Bridge</u> .....	220.19	
<u>Cenotaph Light Bill</u> .....	135.27	)
Charges on Multiple Fixtures, owned and operated by the New Brunswick Electric Power Commission at \$40.00, \$60.00, \$75.00 and \$90.00 per light per year .....	68,058.17	
<u>Maintenance and Labor used in major repairs and new installations</u> .....	<u>100.99</u>	
Gross Expenditure .....	\$ 73,667.54	
<u>Less Credit (Old Burial Ground, Coliseum, Wilmot Park)</u> .....	<u>1,076.00</u>	
NET EXPENDITURE .....	\$ 72,591.54	<u>=====</u>
<u>Total Cost of Series Lighting</u> .....	<u>\$ 5,462.75</u>	

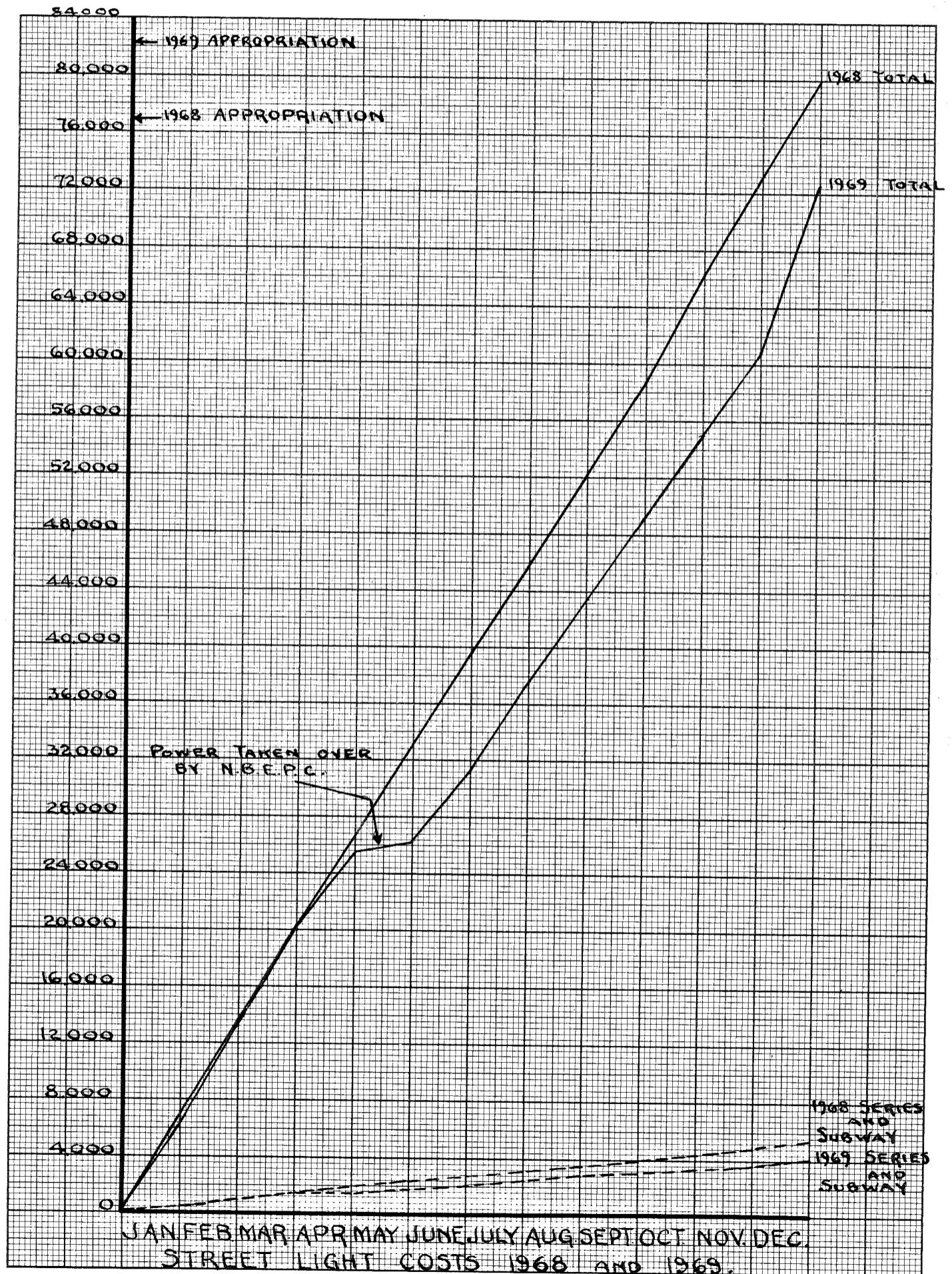
During the year 1969 various changes and extensions were made to the City of Fredericton Lighting System. The Series Street Lighting System is being converted to a Multiple System in 1969-1970.

The total per capita charge for Street Lighting for 1969 population of 22,158 as per 1966 census, is:-

$$\frac{72,591.54}{22,158} = \$ 3.28$$

TABLE SHOWING COMPARATIVE YEARLY COST IN STREET LIGHTING

<u>Year</u>	<u>Total Yearly Cost</u>	<u>Yearly Expenditure</u>
1955	\$ 28,542.77	\$ 27,000.00
1956	31,877.10	27,700.00
1957	33,101.56	29,000.00
1958	36,038.79	33,500.00
1959	39,907.64	37,500.00
1960	44,481.71	44,010.00
1961	46,835.74	46,965.00
1962	46,989.38	47,875.00
1963	52,400.10	51,975.00
1964	57,682.43	56,930.00
1965	63,526.25	62,874.90
1966	72,083.35	70,180.00
1967	74,017.50	73,010.00
1968	80,012.18	76,915.00
1969	72,591.54	82,305.00



## WATER

There are two separate water systems in the City of Fredericton.

- 1) During 1969 the south side of the Saint John River derived its water from four Gravel Wall Wells and a Rock Wall Well. Three of these Gravel Wall Wells, namely #1, #3 and #4 are situated in Wilmot Park and #5 on Woodstock Road on the south bank of the Saint John River, west of the Royal Canadian Mounted Police property. This property was acquired from the Province of New Brunswick in 1968. The Rock Wall Well is situated in Cameron Court and supplies approximately three quarters of the residences on Hanwell Road.
- 2) The water supply on the north side of the Saint John River is derived from three Wells; two of these Wells are outside the City Limits and pump directly into the system and a 1,000,000 Gallon Reservoir. The third Well is located on Bridge Street. Bridge Street Well is a standby service only due to marginal chemical characteristics.

Chlorine has been added to the Water in Carleton Ward since the reports from the City Analyst showed objectionable Coliform in the water. A liquid solution (HTH) is added at the Killarney Road Well.

The water costs for the City of Fredericton are divided as follows:-

- 1) Water Ordinary
- 2) Water Administration (Salaries of Staff and Office Equipment)
- 3) Hydrant Revenue
- 4) Water Pumping Station

Gross Expenditure .....	\$ 347,988.84
Credits .....	<u>36,560.55</u>
Net Expenditure .....	<u>\$ 311,428.29</u>

This account includes all expenditures, other than Capital Expenditure for Water, expenditures for the Main Pumping Station, cost of supply from Wells and salaries and office equipment. These items will appear later under their various headings. Also included are all current Water Expenditures in Carleton Ward.

### 1) Water Ordinary

The expenditure under this heading is made up as follows:-

Gross Expenditure .....	\$ 216,312.39
Credit .....	<u>35,627.54</u>
Net Expenditure .....	<u>\$ 180,684.85</u>

The credits are made up as follows:-

Work done and materials sold to private parties  
when installing a water service over  
ground other than City property or  
when the materials are used on parts of  
the system which do not belong to the

City .....	\$ 19,765.41
Payment on long distance calls by City employees .....	11.05
Town of Marysville (Locating water break) .....	4.60
Mrs. James Shannon (Thawing water service) .....	49.80
Fredericton Housing Ltd. (10 lbs. H.T.H. Tablets) .....	5.00
Auto Machinery (Redefective battery charge) .....	25.39
University of New Brunswick (Repairing of altitude line)	13.00
E. M. Young Ltd. (Credit on return of 100' Plastic Pipe)	9.94
Province of New Brunswick (Sale of 1" tubing) .....	6.40
C. W. Ritchie and Sons (repair sleeve) .....	56.58
Department of Fisheries and Forestry (Materials at Fish Hatchery) .....	105.34
Hedley Greer (sale of scrap brass) .....	28.84
Fredericton Housing Ltd. (sale of repair sleeve) .....	42.16
Workmen's Compensation (cheque L. Anderson) .....	649.74
Warren General Contracting (copper fitting) .....	2.54
Cambridge Leaseholds Ltd. (payment for meter) .....	30.70
Neptune Meter Co. (credit on meters and parts) .....	722.83
Mrs. Madeline Hare (cost of broken water service) .....	30.70
New Brunswick Teachers Association (replacing 1" meter)	8.66
Rockwell Manufacturing Co. Ltd. (credit on meters).....	32.77
Douglas Bezanson (deduction for cost of uniform) .....	36.90
C. W. Ritchie (replacement cost of 1-1½" meter) .....	75.00
Repairs to frozen water meters .....	57.27
Journal Voucher (lead, copper tubing, corporation and curb cock) .....	376.92
Journal Voucher (proportion of P. McNeill's salary) ....	4,000.00
Journal Voucher (proportion of E. Keenan's salary) ....	5,000.00
Journal Voucher (proportion of L. Coy's salary) .....	4,000.00
Journal Voucher (water used at Wilmot Park, Caretaker's House) .....	30.00
Journal Voucher (water used at Recreation Pools) .....	150.00
Journal Voucher (water used at Fire Stations) .....	<u>300.00</u>
<b>TOTAL .....</b>	<b>\$ 35,627.54</b>

The Gross Expenditure is made up as follows:-

City Payrolls for Hydrants .....	\$ 3,871.84
City Payrolls for Meters (maintenance) .....	9,071.77
City Payrolls for Meters (reading) .....	3,863.40
City Payrolls for Water (installations) .....	8,814.35
City Payrolls for Carleton Ward Pumping Stations .....	2,292.72
City Payrolls for Lincoln Road Pumping Station .....	1,138.60
City Payrolls for Smythe Street, (Booster Station) .....	1,298.65
City Payrolls for Montgomery Street (Booster Station)...	1,024.08
City Payrolls for Cameron Court Pumping Station .....	878.24
City Payrolls for Forest Hill (Booster Station) .....	850.77
City Payrolls Water (Administration) .....	1,512.00
City Payrolls for Forest Hill Reservoir .....	111.68
City Payrolls for Water (Maintenance) .....	<u>12,997.76</u>
Total Payrolls .....	\$ 47,725.86
Material and other charges .....	<u>168,586.53</u>
<b>GROSS EXPENDITURE .....</b>	<b>\$ 216,312.39</b>

No water extensions were laid under this heading in 1969. They appear under "Capital Account Water" and "Capital Account Industrial Development - Wilsey Road."

The following Sprinkler System was installed in 1969 namely at Wilmot Downs Raceway (Fredericton Exhibition Grounds).

There are at present (1969) 73 Sprinkler Systems in the City. The City rate for Sprinkler connection demand was \$120.00 per year, charged to "Fire Protection."

There are in the City, 547 hydrants; 435 on the south side of the Saint John River and 112 on the north side of the Saint John River.

The Hydrant rental on the above Hydrants amounted to \$71,400.00 which will appear in this report later and is not included in credits to "Water Ordinary."

Hydrants were installed at the following locations:-

<u>Location</u>	<u>Number</u>
Rankine Street	3
Woodbridge Street	3
Golf Club Road	1
Colonial Heights	4
Ayres Street	1
Dufferin Street	2
Wilsey Road	3
Wright Street	2
Barker Street	1
St. Mary's Street	1
Indian Reserve	1
Prospect Street	2
Total	24

Included in the above list is one private hydrant, installed on the Indian Reserve, Carleton Ward. This hydrant was supplied by the Federal Government, Department of Indian Affairs.

#### Meters:-

On December 31, 1969 there were 4,949 water services on Meters and 347 services on Flat Rate, making a total of 5,296.

The labor cost per meter for installing, reading, repairing, etc. was \$2.61 for 1969.

185 Meters were installed in 1969.

In 1969, 15 discontinued services were excavated and shut off at the Main.

In 1969 all meters were read quarterly and billed quarterly during the year.

Meters in Stock, December 31, 1969:-

5/8" Meters - repaired and fit for service	)	.....	43
1/2" Meters - repaired and fit for service	)	.....	11
3/4" Meters - repaired and fit for service	)	.....	3
1 " Meters - repaired and fit for service	)	Neptune .....	4
1 1/4" Meters - repaired and fit for service	)	Meters .....	1
1 1/2" Meters - repaired and fit for service	)	.....	2
2" Meters - repaired and fit for service	)	.....	1
3" Meters - repaired and fit for service (Rockwell)	)	.....	0
1/2" Meter to be repaired for service	.....		3
5/8" Meters to be repaired for service	)	Neptune .....	29
1" Meter to be repaired for service	)	Meters .....	1
 New 5/8" Meters (Neptune A.R.B.)	.....		56
New 1 1/2" Meters (Neptune)	.....		0
New 1 1/2" Meters (Rockwell)	.....		1
New 2" Meters (Rockwell)	.....		2
New 4" Meters (Rockwell)	.....		1

Distribution System:-

New Services installed in 1969	.....	133
Old Services relayed in 1969	.....	12
Frozen Services that had to be thawed	.....	3

The Fredericton Distribution System consists of 69.19 miles of Water Main, made up as follows:-

18" Main	.....	0.98 miles
14" Main	.....	0.33 miles
12" Main	.....	6.53 miles
10" Main	.....	7.19 miles
8" Main	.....	16.66 miles
6" Main	.....	31.18 miles
4" Main	.....	6.05 miles
3" Main	.....	<u>0.27</u> miles
 Total	.....	69.19 miles

This does not include the water mains installed by the National Defence at the Exhibition Grounds, University of New Brunswick, and St. Anne's Point Barracks (so called) on Woodstock Road.

The supply system consists of 0.36 miles of 14" Cast Iron Pipe, extending from the Well site at Wilmot Park to the Pumping Station; 0.16 miles of 12" C.I. Pipe extending from Well on the north bank of the Saint John River on Woodstock Road to the Well site at Wilmot Park and 0.10 miles of 15" Steel Pipe extending from the Intake Pier in the Saint John River to the Pumping Station. This latter supply has not been used for Domestic consumption since 1957.

Also included in the above expenditure was the purchase of the following meters from Neptune Meters Limited and Rockwell Manufacturing Company:-

From Neptune Meters Limited:-

- 200 - 5/8" x 3/4" Trident Seal, Frost Proof Cold Water Meters, Imperial Gallons with A.R.B. register and 25' cables.
- 75 - Neptune A.R.B. Meters, including Encoder Register with 25' cables and receptacle for existing 5/8" x 3/4" Trident.
- 6 - 1" Trident Seal, Frost Proof, Cold Water Meters, Imperial Gallons with couplings.

From Rockwell Manufacturing Co.: -

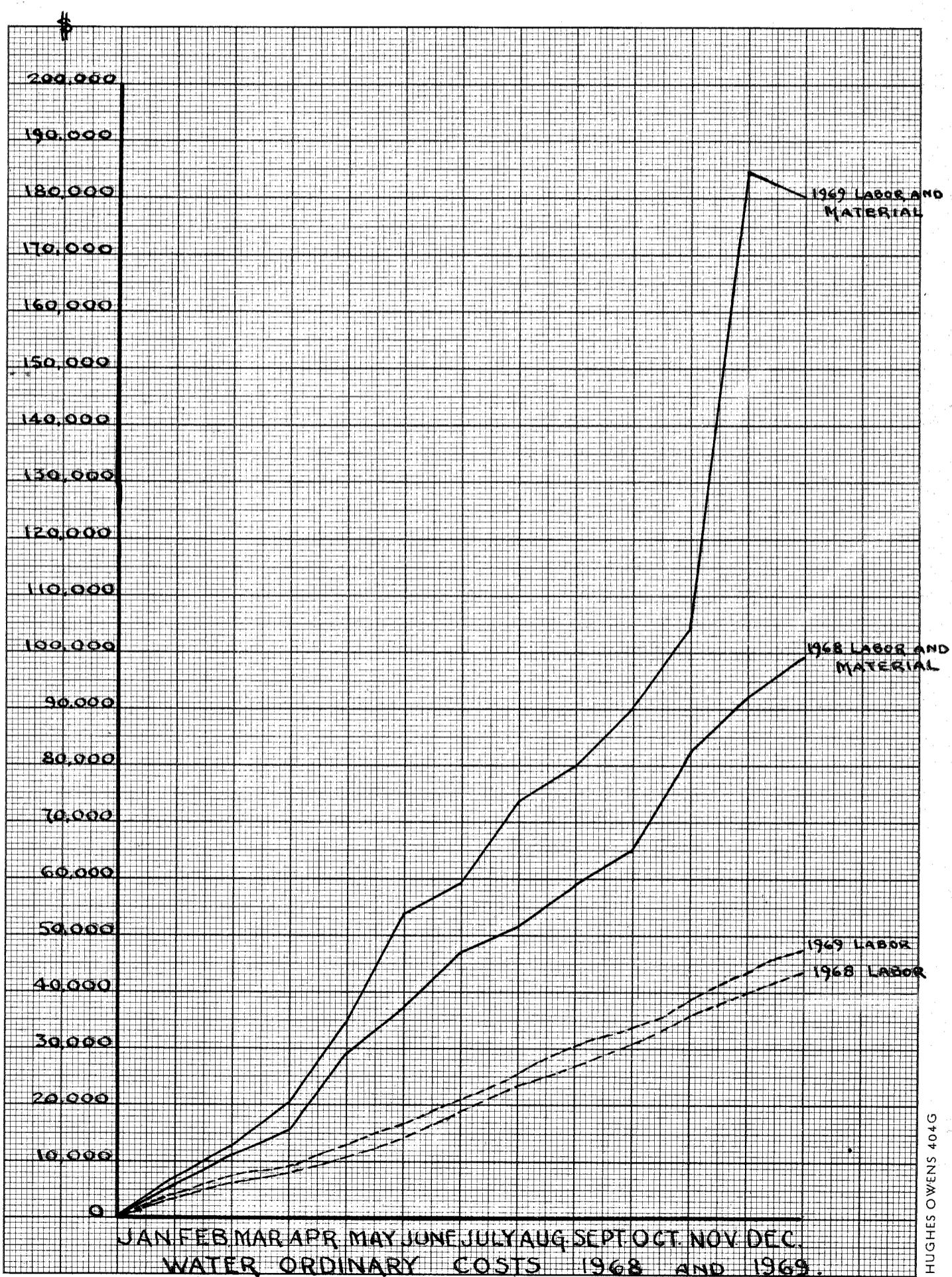
- 3 - 1½" x 1½" S. R. Water Meters c/w flanged connections, Imperial Gallons.
- 3 - 2" x 2" S. R. Water Meters c/w flanged connections, Imperial Gallons.
- 2 - 4" Compound Water Meters, single register, all bronze housing, complete with companion flanges for flanged connections, Imperial Gallons.
- 1 - 3" Compound Water Meter c/w companion flanges, Imperial Gallons.

Under this heading the following was purchased:-

1 - Model 16B Neptune Test Bench with accessories .....	\$ 1,155.50
Plus 8% S. S. and E. Tax .....	<u>92.44</u>
TOTAL .....	<u>\$ 1,247.94</u>

Following is a list of vehicles used and charged to "Water Ordinary" showing a comparison of repair charges for 1968 and 1969, including tires and tubes:-

<u>Name of Vehicle</u>	<u>Year Purchased</u>	<u>Repairs 1968</u>	<u>Repairs 1969</u>
Dodge 1/2 ton #5	1967	\$ 259.13	\$ 204.39
Chevrolet 1/2 ton #2 (Traded in 1969)	1964	1,299.59	152.91
Chevrolet 1/2 ton #2	1969	-----	202.68
Ford 1/2 ton #32	1966	85.10	<u>351.39</u>
TOTALS		\$ 1,643.82	\$ 911.37



Under this heading the following was purchased and charged to "Water Ordinary":-

1 - 1969 Chevrolet 1/2 ton truck Model #10704, Serial #CS14914843042, Motor #K0414 P.W., Key #7J03, Powerglide transmission, 7.5 x 10.5 Mirror, H.D. Rear Springs, 825 x 15, 4 Ply Nylon tires, undercoated .....	\$ 3,217.85
Less Fleet Discount .....	<u>160.85</u>
	\$ 3,057.00
Less 1964 Chevrolet 1/2 ton trade in .....	<u>600.00</u>
	\$ 2,457.00
Plus 8% Provincial Sales Tax .....	<u>196.56</u>
TOTAL .....	<u><u>\$ 2,653.56</u></u>

2) Water Administration (Salaries and Office Equipment)

Gross Expenditure .....	\$ 60,921.12
Credit .....	<u>7.88</u>
Net Expenditure .....	<u><u>\$ 60,913.24</u></u>

The above credit was recancelling of an agreement with Pitney-Bowes Ltd.

The salaries for Water (Engineering Department Staff) amounted to \$28,765.66.

Expenditure for Billing and Collecting was \$32,147.58 and was made up as follows:-

Olivetti Underwood (yearly maintenance on machines) ...	\$ 86.84
Pitney-Bowes (maintenance and rental on machines) ....	242.56
Burroughs Ltd. (printing water bills, ribbon, repairs, etc.) .....	<u>3,282.19</u>
Canadian National Railway (cartage) .....	21.90
C. W. Hall (blotters, plastics, erasers, index cards) .	11.12
Petty Cash (additional postage on meter cards) .....	1.20
Unipress (printing notices) .....	<u>234.42</u>
Addressograph Multigraph (1 year previous maintenance on machine) .....	269.40
Brunswick Office Equipment (overhauling typewriter)....	27.00
Frazer H. Hazlett (envelopes and post cards) .....	<u>388.30</u>
Receiver General of Canada (postage) .....	<u>2,032.70</u>
C. A. Ferguson (repairs to typewriter) .....	5.50
E. M. Young Ltd. (lamp end) .....	1.97
Daily Gleaner (advertisements) .....	29.12
Paul Burden Ltd. (adjusting motor hinges) .....	22.38
Capital Free Press (window envelopes) .....	163.60
National Cash Register (rental) .....	<u>1,890.46</u>
Richards Electric (installing computer) .....	171.51
Journal Voucher (City labor) .....	1,512.00
Salaries .....	<u><u>21,753.41</u></u>
TOTAL .....	<u><u>\$ 32,147.58</u></u>

### 3) Hydrant Revenue

Hydrant revenue amounting to \$71,400.00 was rental on hydrants in the City of Fredericton, charged to the Fire Department at \$120.00 per hydrant per year. Revenue for hydrants and sprinklers on private property appears under "Revenue Account."

### 4) Water Pumping Station

Gross Expenditure .....	\$ 70,485.33
Credits .....	<u>655.13</u>
Net Expenditure .....	\$ 69,830.20

The above credit is made up as follows:-

Imperial Oil Ltd. (return of Barrell) .....	\$ 7.00
Victoria Public Hospital (repairs to fence posts) .....	45.00
Journal Voucher (concrete) .....	28.20
John Malloy (Compensation cheques) .....	495.60
George Parker (Compensation cheque) .....	<u>79.33</u>
TOTAL .....	\$ 655.13

The above expenditure is divided as follows:-

City Payrolls for salaries of employees at Pumping Station .....	\$ 31,472.96
Work done by City employees in and around the Pumping Station .....	768.03
Work done by City employees at Cameron Court Pump and Well .....	878.24
Material charges .....	<u>36,710.97</u>
TOTAL .....	\$ 69,830.20

The material cost of \$36,710.97 is made up as follows:-

Item 1 - Light and Power supplied by Maritime Electric Co. and New Brunswick Electric Power Commission .....	\$ 12,643.97
Item 2 - Light and Power supplied by Maritime Electric Co. and New Brunswick Electric Power Commission at Wells .....	8,266.53
Item 3 - Heating (6,032.6 gallons furnace oil) .....	869.90
Item 4 - Diesel Fuel (3,000 gallons) .....	442.50
Item 5 - Liquid Chlorine (1800 lbs.) .....	338.70
Item 6 - Oil (2 Cases HDX-30) .....	\$ 21.52
(3 Cases #10 Eno Motor) .....	34.20
(1 Barrel Esstic #43) .....	<u>39.11</u> ..... <u>94.83</u>
Forward .....	\$ 22,656.43

	Carried Forward .....	\$ 22,656.43
Item 7	- Maintenance and repairs to building and equipment .....	4,143.81
Item 8	- New Installations.....	1,921.29
Item 9	- Supplies, packing rags, lamps, tools, etc. ..	340.80
Item 10	- Stationery forms, charts, chemicals, ink, etc.	125.12
Item 11	- Workmen's Compensation .....	320.00
Item 12	- E. W. Hagerman (City Analyst Salary) .....	1,890.00
Item 13	- Province of New Brunswick (Taxes) .....	3,223.79
Item 14	- Property Insurance .....	128.33
Journal Voucher (gas, varsol, rock dust)	.....	34.60
Journal Voucher (City machinery)	.....	28.00
Journal Voucher (Pension contributions)	.....	1,788.97
Miscellaneous (Uniforms, dues, telephones, keys, etc.)..		<u>764.96</u>
	TOTAL .....	\$ 37,366.10
Less credits as previously shown .....		<u>655.13</u>
	NET EXPENDITURE .....	<u>\$ 36,710.97</u>

Item 3 - Heating:-

Following is the yearly consumption and costs of heating at the Fredericton Pumping Station Plant for the last ten years:-

<u>Year</u>	<u>Gallons</u> <u>Furnace Oil</u>	<u>Cost</u>
1960	6,165.5	1,012.19
1961	4,513.8	709.01
1962	5,079.1	763.10
1963	5,592.8	822.48
1964	5,355.4	762.55
1965	5,067.2	707.75
1966	5,583.1	769.80
1967	3,961.7	539.84
1968	6,121.5	837.63
1969	6,032.6	869.90

Item 7 - Maintenance and Repairs - Water Pumping Station:-

In reference to Item #7, the following is included:-

Removed funnels on Aerators and constructed concrete walls around the Aerators; painted and repaired buildings.

The glass in the storm windows was replaced and 1/4 inch moulding was put on instead of putty. These windows were cleaned and painted.

The Trim and Doors on the Pumping Station Building were painted.

The 1,000 gallon underground furnace oil tank was removed and two 200 gallon tanks were installed in the building, adjoining the furnace room.

Nine fence posts were replaced that had been broken and the fence next to the Victoria Public Hospital was repaired.

The operators' room was painted and a new fluorescent light installed.

The Gate Valves were painted and the trim around the Fairbanks Morse Motor was also painted including the steps.

The Air Pressure Tanks and Heat Radiators were painted.

#### Item 8 - New Installations

A new Flo-Recorder was installed at the Pumping Station to record the flow at the Lincoln Road Pumping Station and a new Recorder for the reading of the Water level for the Regent Street Reservoir was also installed.

The Pumping Station Plant at the present time has Wells #1, 3 and 4 operating automatically on demand, and Well #5 and Cameron Court Well operating manually. The Saint John River supply operates manually and the supply must pass through the Filter Plant for purification. This supply will only be used in an emergency; that is, when the Wells are not operating due to failure, etc. or when the demand for water is higher than the Wells can produce or during a prolonged electrical interruption, probably longer than 24 hours.

During a 24-hour interruption, the 2,000,000 Imperial Gallon Reservoir will supply the system unless there is a serious break or a fire when a high consumption of water is required.

**COMPARISON OF WATER PUMPED AND COSTS  
FOR SOUTH SIDE OF RIVER  
FOR LAST NINETEEN YEARS**

<u>Year</u>	<u>Imperial Gallons Produced</u>	<u>Production Expenditures</u>	<u>Production Costs per 1,000 Gallons</u>
1951	367,130,000	\$ 35,058.09	9.5 cents
1952	339,330,000	40,476.10	11.9 cents
1953	351,310,000	36,179.74	10.3 cents
1954	388,540,000	40,403.81	10.4 cents
1955	376,591,000	48,063.07	12.7 cents
1956	448,096,000 (13 months)	41,351.18	9.2 cents
1957	469,185,000	42,465.50	9.0 cents
1958	454,765,000	42,888.56	9.4 cents
1959	487,704,000	47,923.19	9.8 cents
1960	520,081,000	50,280.09	9.6 cents
1961	510,250,000	45,081.88	8.8 cents
1962	499,880,000	48,298.53	9.7 cents
1963	519,168,000	48,441.10	9.3 cents
1964	544,650,000	52,431.23	9.6 cents
1965	605,170,000	50,915.76	8.4 cents
1966	634,501,000	50,519.49	8.0 cents
1967	668,514,000	52,749.40	7.9 cents
1968	735,296,000	64,617.14	8.8 cents
1969	730,089,200	69,831.20	9.5 cents

The columns in the preceding comparison, showing Imperial Gallons produced, does not include water used from Wells in Carleton Ward.

The total water consumption of Wells in Carleton Ward for 1969 was 124,230,030 gallons.

The total amount of water pumped from January 1, 1969 to December 31, 1969 therefore, for the whole City is 854,319,230 Imperial Gallons.

The total net water expenditure (operating) for the City from January 1, 1969 to December 31, 1969 is \$250,515.05.

Therefore the net cost to pump and deliver to the customers, 1,000 Imperial Gallons of Water from January 1, 1969 to December 31, 1969 is ...

$$\frac{250,515}{854,319} = 29.3 \text{ cents}$$

All the preceding costs shown under "Water Pumping Station" and "Water Ordinary" do not include bond payments or sinking fund charges.

WATER AND SEWER REVENUE 1969

WATER:-

<u>Revenue</u>	<u>Net Expenditure</u>	<u>Credit</u>
Water Pumping Station	\$ 69,830.20	
Water Ordinary	\$ 392,334.86	180,684.85
Hydrants (Private)	6,360.00	
Sprinklers	8,640.00	
Hydrants (City owned)	56,400.00	
Water Office		
Administration	32,147.58	
Salaries	28,765.66	
Principal & Interest	<u>151,494.63</u>	
TOTALS	<u>\$ 463,734.86</u>	<u>\$ 811.94</u>

DOMESTIC SEWERS:-

Sewerage Domestic	\$ 147,449.86	22,097.60	
Principal & Interest		<u>60,000.00</u>	
TOTALS	<u>\$ 147,449.86</u>	<u>\$ 82,097.60</u>	<u>\$ 65,352.26</u>

The cost of 1,000 gallons of water delivered, including principal and interest, was as follows:-

Total cost of water per thousand gallons:-

$$\frac{462,922.92}{854,319} = 54.1 \text{ cents}$$

45.5 cents/1000 - Net after deducting \$ 7.50 from B.P.

Principal and Interest Costs:-

$$\frac{151,494.63}{854,319} = 17.7 \text{ cents}$$

Administration and Operating Costs:-

$$\frac{311,428.29}{854,319} = 36.4 \text{ cents}$$

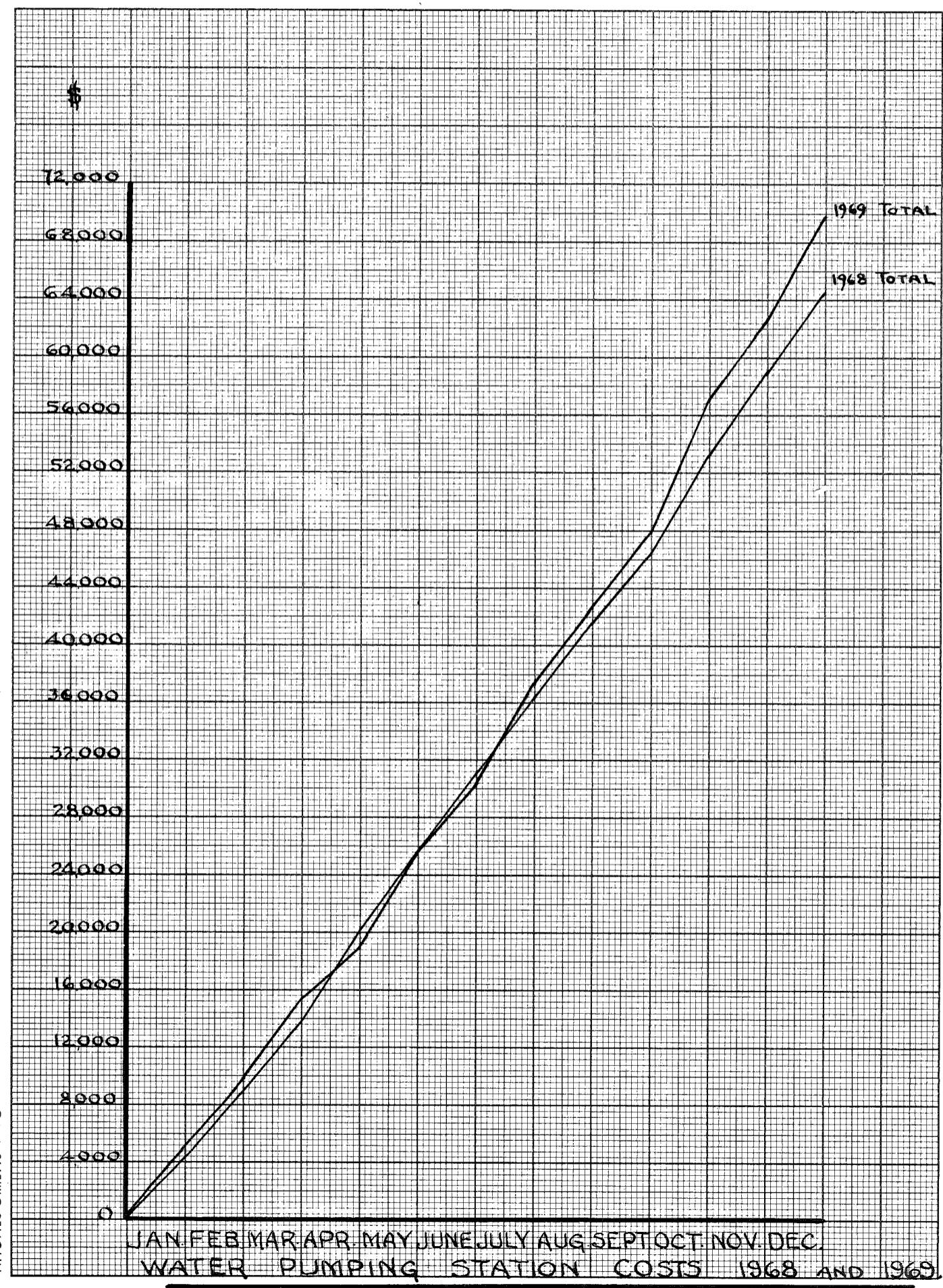
The Water Pumping Station was under the supervision of Plant Superintendent, Mr. George Parker.

Accompanying this Report is the Report of Mr. E. W. Hagerman, City Analyst on the Fredericton Water Supply from January 1, 1969 to December 31, 1969.

Respectfully submitted,

*W. L. Barrett*

CITY ENGINEER.



## FREDERICTON WATER SUPPLY

YEAR 1969

JANUARY 1st to DECEMBER 31st

Fourteen years ago Fredericton abandoned the Saint John River as its source of water supply. On July 29th, 1955 number 1 Well was turned into the City Mains. Up to the present, with the exception of two or three short peak periods, in the summer of 1957, nothing but Well water has entered the system.

The main supply for the south side of the Saint John River is pumped from four gravel packed Wells. These Wells produce about 2,800,000 Imperial Gallons daily. Another 3,000 gallons per day is taken from a rock Well drilled on the southeast side of Hanwell Road in Cameron Court. This Well supplies a small number of dwellings in the nearby area.

The three oldest Wells are in Wilmot Park (Numbers 1, 3 and 4 - Number 2 was abandoned because of high manganese). The latest, Wilmot Point Well (#5) is on the river bank, a short distance above the intersection of Woodstock Road with Rookwood Avenue.

This Well (No. 5) was added to the system in the spring of 1969. It supplies a water of good quality excepting for its manganese load which is higher than is desirable. This was not unexpected as the samples taken from the test holes, bored during the exploration for the Well site, indicated varying quantities of this undesirable element.

The water from the finished #5 Well varies around 0.25 parts per million (ppm) of manganese. By mixing this water with that from the older Wells, which are much lower in manganese viz (No. 1 - .02 ppm; No. 3 - .01 ppm; No. 4 - .02 ppm) it is possible to deliver an effluent of 0.12 ppm manganese.

Test boring, while exploring for #5 Well failed to locate aquifers capable of supplying water free of or low (.05 ppm or less) in manganese. With an exploding population and consequent increasing water demand, the City may find it necessary to install manganese treatment for some of its future Wells.

All four Wells deliver their waters to the old Pumping Station at the head of Queen Street. Here they are mixed in the proportions desired and chlorinated to about 0.1 to 0.15 parts per million of free chlorine before passing to the pipe grid and reservoirs.

The Hanwell Rock Well, previously mentioned, began pumping in June 1967. It supplies several houses nearby in Cameron Court and also a strip area facing on Hanwell Road and extending up to the City boundary line.

This Well is separate from the main City system. It has its own pump house and chlorinator and delivers water to a 100,000 gallon high level reservoir. The chlorinator is electrically connected to the pump in such a manner that water cannot be delivered to the system without receiving its dose of

chlorine, which is from 0.2 to 0.3 ppm. These amounts will diminish to 0.1 or 0.2 ppm. in the reservoir.

Oil tastes and smells were reported in the Hanwell system in the afternoon of December 24th. Pumping to waste began immediately and early in the forenoon of Christmas Day, the effluent from the Well was free of oil. The short time required to clear the Well effluent of oil eliminated the possibility of a contaminated aquifer. The water mains required several flushings, spread over several days, before they were clean.

Rumoured reports said that a barrel of form oil had been spilled uphill from the Well. The recent heavy rains then washed it downhill to the Well site where it somehow gained entrance to the Well. Occasional reports of oil persisted into January. They were usually complaints of oil smells in the hot water systems which seemed difficult to flush properly.

There are three Wells on the north side of the river. One Rock Wall Well is on Bridge Street, a Rock Well on St. Mary's Street and a second Rock Well east of Highland Avenue and adjacent to a one million gallon reservoir, known as the Highland Avenue Reservoir. The Wells take their names from the streets mentioned above, along which they are situated.

Chlorine is added at St. Mary's Street pump house to produce a free residual of 0.2 to 0.35 ppm.

Water hardness is of concern to all consumers because soap consumption rises with hardness increase. Fredericton water is moderately soft according to hardness classification tables.

South of the river the hardness varies between 70 and 80 ppm (about 4½ grains per U. S. gallon or 5½ grains per Imperial gallon). The variation depends on the combination of Wells in use.

It is not feasible to give a general hardness figure for Carleton Ward because the waters from the three Wells do not come to a common mixing point. The hardness of St. Mary's Street Well is 88 ppm (5 grains U. S. gallons or 6 grains Imperial Gallons) Bridge Street Well is 118 ppm (6½ grains U. S. Gallons or 8¼ grains Imperial Gallons). Highland Avenue Well is 52 ppm (3 grains U. S. Gallons or 3½ grains Imperial Gallons). The hardness has dropped in the Highland Avenue Well. It was 75 ppm in 1963 and held this through 1965, failing to 64 in 1966, to 53, 55 and 52 in 1967, 1968 and 1969 respectively. The reduction in hardness of this Well should benefit many parts of the system. Fifty-four samples were collected from various parts of the City for bacteriological examination. From each sample, five 10 milliliter portions were put on test making 270 portions tested during the year.

Attached is a condensation of the U. S. Treasury Standards for potable water and a list of sampling stations.

EXTRACTS FROM UNITED STATES TREASURY STANDARDS  
APPLICABLE TO FREDERICTON WATER SUPPLY

- 1 - A minimum sample of 100 cubic centimeters is collected;
- 2 - Five 10 cc. portions of the collected sample are tested;
- 3 - Primary plantings are made in Lactose Broth;
- 4 - Gas formers in Lactose Broth are confirmed in Brilliant Green Bile - 2%.

Application of Test

- 1 - Of all the 10 cc. portions examined per month, not more than 10% shall show positive;
- 2 - When less than 20 samples per month are examined, one sample may have three positive portions;
- 3 - Using a standard sample of five 10 cc. portions, provides for an estimation of the Most Probable Number (M.P.N.) of Coliform bacteria per 100 cc. of sample as shown in the table below.

<u>Negative</u>	<u>Positive</u>	<u>When five 10 cc. portions are tested</u>
5	0	Less than 2.2 per 100 is the M.P.N.
4	1	2.2 per 100 is the M.P.N.
3	2	5.1 per 100 is the M.P.N.
2	3	9.2 per 100 is the M.P.N.
1	4	16 per 100 is the M.P.N.
0	5	More than 16 per 100 is the M.P.N.

Following is a list of the sampling points used  
in 1969:

<u>DATE OF SAMPLE</u>	<u>ORIGIN OF SAMPLE</u>	<u>TEST DIVIDES THE 5 PORTIONS AS POSITIVE OR NEGATIVE. NO ENTRY SHOWS WHEN ALL 5 ARE NEGATIVE</u>
<u>January</u>		
Friday 3	Pumping Station Influent	
Sunday 12	Hanwell Well (raw)	
Friday 17	MacLaren Ave. Fire Station	
Thursday 23	Hanwell Well (raw)	2 positive 3 negative
Thursday 23	597 Hanwell Road	
<u>February</u>		
Sunday 2	Hanwell Well (raw)	4 positive 1 negative
Tuesday 11	U.N.B. Engineering Bldg.	
Monday 17	MacLaren Ave. Fire Station	
Sunday 23	Hanwell Well (raw)	1 positive 4 negative
Monday 24	510 Hanwell Road	
<u>March</u>		
Sunday 2	Hanwell Well (raw)	5 positive 0 negative
Saturday 8	U.N.B. Engineering Bldg.	
Saturday 15	MacLaren Avenue Fire Sta.	
Thursday 27	99 Smith Street	
<u>April</u>		
Monday 7	434 Canterbury Drive	
Friday 11	99 Smith Street	
Wednesday 16	127 Charlotte Street	
Monday 21	849 Union Street	
Tuesday 29	K - Mart	
<u>May</u>		
Saturday 3	247 Lynhaven Street	
Monday 12	U.N.B. Engineering Bldg.	
Friday 23	Hanwell Well (raw)	
Monday 26	99 Smith Street	
<u>June</u>		
Thursday 5	Rural Cemetery	
Thursday 12	Fredericton Boat Club	
Friday 20	84 Topcliffe Crescent	
Tuesday 24	No. 5 Well (raw)	
Monday 30	York Structural Steel (Wilsey Road)	
<u>July</u>		
Thursday 3	Tractors and Equipment	
Monday 14	No. 5 Well (raw)	
Friday 18	597 Hanwell Road	
Friday 25	277 Gibson Street	

<u>DATE OF SAMPLE</u>	<u>ORIGIN OF SAMPLE</u>	<u>TEST DIVIDES THE 5 PORTIONS AS POSITIVE OR NEGATIVE. NO ENTRY SHOWS WHEN ALL 5 ARE NEGATIVE</u>
-----------------------	-------------------------	--

August

Friday 1	479 Union Street
Thursday 14	Hanwell Well (raw)
Friday 22	Hanwell Well (raw)
Wednesday 27	99 Smith Street

September

Tuesday 2	Rural Cemetery
Monday 8	U.N.B. Engineering Bldg.
Thursday 18	York Steel, Wilsey Road
Wednesday 24	510 Hanwell Road
Monday 29	MacLaren Ave. Fire Station

October

Monday 6	Fredericton Boat Club
Tuesday 14	127 Charlotte Street
Thursday 23	Centennial Bldg.
Tuesday 28	510 Hanwell Road

November

Tuesday 4	Leeds Drive, Skyline Acres
Monday 10	Montgomery Reservoir (concrete)
Tuesday 18	Experimental Station
Saturday 22	377 Gibson Street

December

Tuesday 2	Dunn's Crossing Road
Monday 15	Hanwell Well
Wednesday 24	498 Hanwell Road @ 11 A.M. Oily taste reported in P.M.
Wednesday 24	No. 5 Well (raw)
Thursday 25	Hanwell Road Well (raw)      1 positive    4 negative

FEBRUARY 16, 1970

(Signed)      E. W. HAGEMAN,  
CITY ANALYST.

DOMESTIC SEWER INSTALLATIONS 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
1.	Topmar Housing Ltd.	116 McNair DR.	Apr/14/69	4" Transite
2.	Topmar Housing Ltd.	38 Richards Ct.	Apr/15/69	4" "
3.	F'ton Housing Ltd.	212 Topcliffe Cres.	Apr/16/69	4" "
4.	F'ton Housing Ltd.	222 Topcliffe Cres.	Apr/16/69	4" "
5.	F'ton Housing Ltd.	202 Topcliffe Cres.	Apr/16/69	4" "
6.	Roland Rickard	724 Irvine St.	Apr/17/69	4" "
7.	Larry Hill	20 Irvine St.	Apr/18/69	4" "
8.	Topmar Housing Ltd.	98 McNair Dr.	Apr/23/69	4" "
9.	Topmar Housing Ltd.	28 Richards Ct.	Apr/24/69	4" "
10.	Topmar Housing Ltd.	20 Richards Ct.	Apr/25/69	4" "
11.	Topmar Housing Ltd.	21 Richards Ct.	Apr/25/69	4" "
12.	J. L. E. Price & Co.	780 Montgomery St.	Apr/30/69	8"
13.	Vincent & Co.	Wilsey Road	May/5/69	4" "
14.	Hill Bros.	635 Hanwell Rd.	May/7/69	4" "
15.	Clearview T.V.	108 Prospect St.	May/12/69	4" "
16.	Topmar Housing Ltd.	40 McNairDr.	May/12/69	4" "
17.	Topmar Housing Ltd.	154 McNair Dr.	May/12/69	4" "
18.	F'ton Housing Ltd.	200 Surrey Cres.	May/13/69	4" "
19.	F'ton Housing Ltd.	165 Surrey Cres.	May/13/69	4" "
20.	Hill Bros.	92 Bailey Dr.	May/14/69	4" "
21.	Larry Hill	50 Walker St.	May/15/69	4" "
22.	Highland Co.	26 Cameron Ct.	May/16/69	4" "
23.	Highland Co.	46 Cameron Ct.	May/20/69	4" "
24.	Starlite Homes Ltd.	170 Limerick Rd.	May/21/69	4" "
25.	Topmar Housing Ltd.	180 Limerick Rd.	May/21/69	4" "
26.	Arthur Wilkins	122 LynhavenCt.	May/21/69	4" "
27.	Starlite Homes Ltd.	188 McNair Dr.	May/22/69	4" "
28.	Topmar Housing Ltd.	8 Hearne St.	May/22/69	4" "
29.	Topmar Housing Ltd.	49 McNair Dr.	May/23/69	4" "
30.	F'ton Housing Ltd.	37 Surrey Cres.	May/27/69	4" "
31.	F'ton Housing Ltd.	135 Surrey Cres.	May/27/69	4" "
32.	F'ton Housing Ltd.	20 Surrey Cres.	May/27/69	4" "
33.	Topmar Housing Ltd.	178 McNair Dr.	May/29/69	4" "
34.	Topmar Housing Ltd.	162 McNair Dr.	May/30/69	4" "
35.	Topmar Housing Ltd	148 McNair Dr.	May/30/69	4" "
36.	Topmar Housing Ltd.	140 McNair r.	May/30/69	4" "
37.	Topmar Housing Ltd.	696 King's College Rd.	Jun/2/69	4" "
38.	Starlite Homes Ltd.	41 Michener Ct.	Jun/3/69	4" "
39.	Starlite Homes Ltd.	22 Michener Ct.	Jun/4/69	4" "
40.	Neil Arbeau	269 Highland Ave.	Jun/4/69	4" "
41.	Hill Bros.	281 Willingdon St.	Jun/6/69	4" "
42.	Hill Bros.	269 Willingdon St.	Jun/6/69	4" "
43.	Larry Hill	108 Bailey Dr.	Jun/9/69	4" "
44.	Earl G. Burlock	30 Walker St.	Jun/9/69	4" "
45.	Martime Engineering	79 Prospect St.	Jun/10/69	4" "
46.	F'ton Housing Ltd.	250 Woodbridge St.	Jun/11/69	4" "
47.	F'ton Housing Ltd.	340 Woodbridge St.	Jun/12/69	4" "
48.	F'ton Housing Ltd.	345 Woodbridge St.	Jun/13/69	4" "
49.	F'ton Housing Ltd.	270 Woodbridge St.	Jun/13/69	4" "
50.	F'ton Housing Ltd.	367 Woodbridge St.	Jun/16/69	4" "
51.	F'ton Housing Ltd.	295 Woodbridge St.	Jun/17/69	4" "
52.	F'ton Housing Ltd.	260 Woodbridge St.	Jun/18/69	4" "
53.	K. D. Peterson	364 Victoria St.	Jun/19/69	4" "
54.	Highland Co.	16 Cameron Ct.	Jun/19/69	4" "
55.	Highland Co.	36 Cameron Ct.	Jun/20/69	4" "
56.	Topmar Housing Ltd.	712 Graham Ave.	Jun/23/69	4" "
57.	Hill Bros.	214 Willingdon St.	Jun/25/69	4" "
58.	Wilmot Downs	Para Mutual	Jun/25/69	4" "
59.	F'ton Housing Ltd.	273 Woodbridge St.	Jun/26/69	4" "
60.	F'ton Housing Ltd.	357 Woodbridge St.	Jul/2/69	4" "
61.	F'ton Housing Ltd.	377 Woodbridge St.	Jul/3/69	4" "
62.	F'ton Housing Ltd.	290 Woodbridge St.	Jul/4/69	4" "
63.	Diamond Const.	580 Union St.	Jul/7/69	4" "
64.	Highland Co.	155 Oxford St.	Jul/8/69	4" "
65.	Wayne Hill	517-527 Priestman St.	Jul/10/69	6"
66.	Larry Hill	32 Kennedy Ct.	Jul/14/69	4" "
67.	F'ton Housing Ltd.	680 Canterbury Dr.	Jul/15/69	4" "
68.	F'ton Housing Ltd.	653 Canterbury Dr.	Jul/18/69	4" "
69.	F'ton Housing Ltd.	637 Canterbury Dr.	Jul/18/69	4" "
70.	F'ton Housing Ltd.	669 Canterbury Dr.	Jul/18/69	4" "

DOMESTIC SEWER INSTALLATIONS

NO.	NAME	ADDRESS	DATE	SIZE
71.	Starlite Homes	15 Michener Court	Jul.22/69	4" Transite
72.	Highland Co. Ltd.	125 Oxford Street	Jul.23/69	4" "
73.	K. W. Howlett	124 Grey Street	Jul.23/69	4" "
74.	U. N. B.	128 Alexandra Street	Jul.24/69	4" "
75.	Larry Hill	25 Walker Street	Jul.30/69	4" "
76.	Maritime Engineering	780 McEvoy Street	Jul.30/69	4" "
77.	F'ton Housing Ltd.	309 Woodbridge Street	Jul.31/69	4" "
78.	F'ton Housing Ltd.	400 Woodbridge Street	Aug.5/69	4" "
79.	Hill Bros.	665 Hanwell Road	Aug.5/69	4" "
80.	Hill Bros.	585 Hanwell Road	Aug.6/69	4" "
81.	F'ton Housing Ltd.	285 Woodbridge Street	Aug.8/69	4" "
82.	F'ton Housing Ltd.	387 Woodbridge Street	Aug.8/69	4" "
83.	F'ton Housing Ltd;	405 Woodbridge Street	Aug.8/69	4" "
84.	G. Lumsden	122 Miles Street	Aug.11/69	4" "
85.	Leo Brewer	751 Irvine Street	Aug.12/69	4" "
86.	Custom Builders Ltd.	204 Oxford Street	Aug.15/69	4" "
87.	Custom Builders Ltd.	174 Colonial Heights	Aug.18/69	4" "
88.	S.C.R. Construction	218 Colonial Heights	Aug.20/69	4" "
89.	Topmar Housing Ltd.	Wilsey Road	Aug.21/69	4" "
90.	Harold Bamford	27 Surrey Cresent	Aug.22/69	4" "
91.	F'ton Housing Ltd.	325 Woodbridge Street	Aug.25/69	4" "
92.	F'ton Housing Ltd.	397 Woodbridge Street	Aug.26/69	4" "
93.	F'ton Housing Ltd.	380 Woodbridge Street	Aug.28/69	4" "
94.	Maritime Engineering	125 Prospect Street	Sept.5/69	4" "
95.	Topmar Housing Ltd.	711-715 Forest Hill Road.	Sept.10/69	4" "
96.	F'ton Housing Ltd.	370 Woodbridge Street	Sept.11/69	4" "
97.	F'ton Housing Ltd.	280 Woodbridge Street	Sept.12/69	4" "
98.	Hill Bros.	274 Willingdon Street	Sept.18/69	4" "
99.	Starlite Homes	414 Dufferin Street	Sept.18/69	4" "
100.	Starlite Homes	406 Dufferin Street	Sept.19/69	4" "
101.	Leonard Yerxa	881 Grandame Street	Sept.22/69	4" "
102.	Donald Hill	50 Golf Club Road	Sept.23/69	4" "
103.	Diamond Const.	930-932 Union Street	Oct.8/69	6" "
104.	Diamond Const.	910-912 Union Street	Oct.8/69	4" "
105.	Mrs. L. H. Goldman	293 Albert Street	Oct.16/69	4" "
106.	George Parker	570 Lincoln Road	Oct.20/69	4" "
107.	Gorden Parker	562 Lincoln Road	Oct.21/69	4" "
108.	Harold Parker	556 Lincoln Road	Oct.22/69	4" "
109.	Gerald Hewitson	548 Lincoln Road	Oct.23/69	4" "
110.	Euald Larsen	530 Lincoln Road	Oct.24/69	4" "
111.	K. B. White	534 Lincoln Road	Oct.24/69	4" "
112.	Linda Guthrie	540 Lincoln Road	Oct.24/69	4" "
113.	F'ton Housing Ltd.	240 Woodbridge Street	Oct.27/69	4" "
114.	F'ton Housing Ltd.	259 Woodbridge Street	Oct.28/69	4" "
115.	F'ton Housing Ltd.	230 Woodbridge Street	Oct.28/69	4" "
116.	F'ton Housing Ltd.	17 Surrey Cresent	Oct.29/69	4" "
117.	Don Wilson	10 Princess Anne Court	Oct.31/69	4" "
118.	Larry Hill	10 Walker Street	Nov.5/69	4" "
119.	Leo Brewer	753 Irvine Street	Nov.5/69	4" "
120.	Victory Meat Packers	Wilsey Road	Nov.6/69	8" "
121.	Starlite Homes	437 Dufferin Street	Nov.7/69	4" "
122.	Donald Hill	407 Dufferin Street	Nov.7/69	4" "
123.	Starlite Homes	427 Dufferin Street	Nov.12/69	4" "
124.	Topmar Housing	15 Lorne Street	Nov.13/69	4" "
125.	A & W Fundy Ltd.	1180 Smythe Street	Nov.13/69	4" "
126.	Topmar Housing Ltd.	9 Lorne Street	Nov.14/69	4" "
127.	Topmar Housing Ltd.	286 Montgomery Street	Nov.19/69	4" "
128.	Hill Bros.	268 Willingdon Street	Nov.20/69	4" "
129.	F'ton Housing Ltd.	175 Surrey Cresent	Nov.21/69	4" "
130.	K. W. Howlett	257 Noble Street	Nov.25/69	4" "
131.	Victory-Meat Packers	Wilsey Road	Nov.26/69	4" "
132.	Leonard Yerxa	16 Chippin Court	Dec.1/69	4" "
133.	F'ton Housing Ltd.	220 Woodbridge Street	Dec.2/69	4" "
134.	F'ton Housing Ltd.	225 Woodbridge Street	Dec.2/69	4" "
135.	F'ton Housing Ltd.	247 Woodbridge Street	Dec.3/69	4" "
136.	Leonard Yerxa	26 Chippin Court	Dec.5/69	4" "
137.	John Dixon	167 Colonial Heights	Dec.10/69	4" "
138.	L & L Realators	358 King Street	Dec.15/69	4" "
* 139.	Bob Velinsky	175 Oxford St.	Aug.15/69	4" "

WATER INSTALLATIONS 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
1.	Topmar Housing Ltd.	116 McNair Dr.	Apr/14/69	3/4 Copper
2.	Topmar Housing Ltd.	38 Richards Ct.	Apr/15/69	3/4 "
3.	F'ton Housing Ltd.	212 Topcliffe Cres.	Apr/16/69	5/8 "
4.	F'ton Housing Ltd.	222 Topcliffe Cres.	Apr/16/69	5/8 "
5.	F'ton Housing Ltd.	202 Topcliffe Cres.	Apr/16/69	5/8 "
6.	Roland Rickard	724 Irvine St.	Apr/17/69	3/4 "
7.	Larry Hill	20 Irvine St.	Apr/18/69	3/4 "
8.	Topmar Housing Ltd.	98 McNair Dr.	Apr/23/69	3/4 "
9.	Topmar Housing Ltd.	28 Richards Ct.	Apr/24/69	3/4 "
10.	Topmar Housing Ltd.	20 Richards Ct.	Apr/25/69	3/4 "
11.	Topmar Housing Ltd.	21 Richards Ct.	Apr/25/69	3/4 "
12.	J. L. E. Price & Co.	780 Montgomery St.	Apr/30/69	6" C. I.
13.	Vincent & Co.	Milsey Road	May/5/69	3/4 Copper
14.	Hill Bros.	635 Hanwell Rd.	May/7/69	3/4 "
15.	Clearview T.V.	108 Prospect St.	May/12/69	3/4 "
16.	Topmar Housing Ltd.	40 McNair Dr.	May/12/69	3/4 "
17.	Topmar Housing Ltd.	154 McNair Dr.	May/12/69	3/4 "
18.	F'ton Housing Ltd.	200 Surrey Cres.	May/13/69	3/4 "
19.	F'ton Housing Ltd.	165 Surrey Cres.	May/13/69	3/4 "
20.	Hill Bros.	92 Bailey Dr.	May/14/69	3/4 "
21.	Larry Hill	50 Walker St.	May/15/69	3/4 "
22.	Highland Co.	26 Cameron Ct.	May/16/69	3/4 "
23.	Highland Co.	46 Cameron Ct.	May/20/69	3/4 "
24.	Starlite Homes	170 Limerick Rd.	May/21/69	3/4 "
25.	Topmar Housing Ltd.	180 Limerick Rd.	May/21/69	3/4 "
26.	Arthur Wilkins	122 Lynhaven Ct.	May/21/69	3/4 "
27.	Starlite Homes	188 McNair Dr.	May/22/69	3/4 "
28.	Topmar Housing Ltd.	8 Hearne St.	May/22/69	3/4 "
29.	Topmar Housing Ltd.	49 McNair Dr.	May/23/69	3/4 "
30.	F'ton Housing Ltd.	37 Surrey Cres.	May/27/69	3/4 "
31.	F'ton Housing Ltd.	135 Surrey Cres.	May/27/69	3/4 "
32.	F'ton Housing Ltd.	20 Surrey Cres.	May/27/69	3/4 "
33.	Topmar Housing Ltd.	178 McNair Dr.	May/29/69	3/4 "
34.	Topmar Housing Ltd.	162 McNair Dr.	May/30/69	3/4 "
35.	Topmar Housing Ltd.	148 McNair Dr.	May/30/69	3/4 "
36.	Topmar Housing Ltd.	140 McNair Dr.	May/30/69	3/4 "
37.	Topmar Housing Ltd.	696 King's College Rd.	Jun/2/69	3/4 "
38.	Starlite Homes	41 Michener Ct.	Jun/3/69	3/4 "
39.	Starlite Homes	22 Michener Ct.	Jun/4/69	3/4 "
40.	Neil Arbeau	269 Highland Ave.	Jun/4/69	3/4 "
41.	Hill Bros.	281 Willingdon St.	Jun/6/69	3/4 "
42.	Hill Bros.	269 Willingdon St.	Jun/6/69	3/4 "
43.	Larry Hill	108 Bailey Dr.	Jun/9/69	3/4 "
44.	Earl G. Burlock	30 Walker St.	Jun/9/69	3/4 "
45.	Martime Engineering	79 Prospect St.	Jun/10/69	3/4 "
46.	F'ton Housing Ltd.	250 Woodbridge St.	Jun/11/69	5/8 "
47.	F'ton Housing Ltd.	340 Woodbridge St.	Jun/12/69	5/8 "
48.	F'ton Housing Ltd.	345 Woodbridge St.	Jun/13/69	5/8 "
49.	F'ton Housing Ltd.	270 Woodbridge St.	Jun/13/69	5/8 "
50.	F'ton Housing Ltd.	367 Woodbridge St.	Jun/16/69	5/8 "
51.	F'ton Housing Ltd.	295 Woodbridge St.	Jun/17/69	5/8 "
52.	F'ton Housing Ltd.	260 Woodbridge St.	Jun/18/69	5/8 "
53.	K. D. Peterson	364 Victoria St.	Jun/19/69	3/4 "
54.	Highland Co.	16 Cameron Ct.	Jun/19/69	3/4 "
55.	Highland Co.	36 Cameron Ct.	Jun/20/69	3/4 "
56.	Topmar Housing Ltd.	712 Graham Ave.	Jun/23/69	3/4 "
57.	Hill Bros.	214 Willingdon St.	Jun/25/69	3/4 "
58.	Wilmot Downs	Para Mutual	Jun/25/69	5/8 "
59.	F'ton Housing Ltd.	273 Woodbridge St.	Jun/26/69	5/8 "
60.	F'ton Housing Ltd.	357 Woodbridge St.	Jul/2/69	5/8 "
61.	F'ton Housing Ltd.	377 Woodbridge St.	Jul/3/69	5/8 "
62.	F'ton Housing Ltd.	290 Woodbridge St.	Jul/4/69	5/8 "
63.	Diamond Const.	580 Union ST.	Jul/7/69	3/4 "
64.	Highland Co.	155 Oxford St.	Jul/8/69	3/4 "
65.	Wayne Hill	517-527 Priestman St.	Jul/10/69	1"
66.	Larry Hill	32 Kennedy Ct.	Jul/14/69	3/4 "
67.	F'ton Housing Ltd.	680 Canterbury Dr.	Jul/15/69	5/8 "
68.	Recreation Dept.	Cor. Church & McLeod	Jul/16/69	3/4 "
69.	F'ton Housing Ltd.	653 Canterbury Dr.	Jul/18/69	3/4 "
70.	Wilmot Downs	Para Mutual	Jul/18/69	6" C.I. Spklei

WATER INSTALLATIONS 1969

NO.	NAME	ADDRESS	DATE	SIZE
71.	F'ton Housing Ltd.	637 Canterbury Drive	Jul.18/69	3/4" Copper
72.	F'ton Housing Ltd.	669 Canterbury Drive	Jul.18/69	3/4" "
73.	Starlite Homes	15 Michener Court	Jul.22/69	3/4" "
74.	Highland Co. Ltd.	125 Oxford Street	Jul.23/69	3/4" "
75.	K. W. Howlett	124 Grey Street	Jul.23/69	3/4" "
76.	Larry Hill	25 Walker Street	Jul.30/69	3/4" "
77.	Maritime Engineering	780 McEvoy Street	Jul.30/69	1" "
78.	F'ton Housing Ltd.	309 Woodbridge Street	Jul.31/69	5/8" "
79.	F'ton Housing Ltd.	400 Woodbridge Street	Aug.5/69	5/8" "
80.	Hill Bros.	665 Hanwell Road	Aug.5/69	3/4" "
81.	Hill Bros.	585 Hanwell Road	Aug.6/69	3/4" "
82.	F'ton Housing Ltd.	285 Woodbridge Street	Aug.8/69	5/8" "
83.	F'ton Housing Ltd.	387 Woodbridge Street	Aug.8/69	5/8" "
84.	F'ton Housing Ltd.	405 Woodbridge Street	Aug.8/69	5/8" "
85.	G. Lumsden	122 Miles Street	Aug.11/69	3/4" "
86.	Leo Brewer	751 Irvine Street	Aug.12/69	3/4" "
87.	Custom Builders	204 Oxford Street	Aug.14/69	3/4" "
88.	Custom Builders	174 Colonial Heights	Aug.18/69	3/4" "
89.	S. C. R. Construction	218 Colonial Heights	Aug.20/69	3/4" "
90.	Topmar Housing Ltd.	Wilsey Road	Aug.21/69	3/4" "
91.	Harold Bamford	27 Surrey Crescent	Aug.22/69	3/4" "
92.	F'ton Housing Ltd.	325 Woodbridge Street	Aug.25/69	5/8" "
93.	F'ton Housing Ltd.	397 Woodbridge Street	Aug.26/69	5/8" "
94.	F'ton Housing Ltd.	380 Woodbridge Street	Aug.28/69	5/8" "
95.	Maritime Engineering	125 Prospect Street	Sept.5/69	3/4" "
96.	Topmar Housing Ltd.	711-715 Forest Hill Road	Sept.10/69	3/4" "
97.	F'ton Housing Ltd.	370 Woodbridge Street	Sept.11/69	5/8" "
98.	Desjourdy Const.	Lincoln Rd. Station # 4	Sept.11/69	3/4" "
99.	F'ton Housing Ltd.	280 Woodbridge Street	Sept.12/69	5/8" "
100.	U. N. B.	Old Nursing School	Sept.16/69	3/4" "
101.	Hill Bros.	274 Willingdon Street	Sept.18/69	3/4" "
102.	Starlite Homes	414 Dufferin Street	Sept.18/69	3/4" "
103.	Starlite Homes	406 Dufferin Street	Sept.19/69	3/4" "
104.	Recreation Dept.	Massey St. Playground	Sept.19/69	1" "
105.	Leonard Yerxa	881 Grandame Street	Sept.22/69	3/4" "
106.	Donald Hill	50 Golf Club Road	Sept.23/69	3/4" "
107.	Mrs. L.H. Goldman	293 Albert Street	Oct.16/69	3/4" "
108.	F'ton Housing Ltd.	240 Woodbridge Street	Oct.27/69	5/8" "
109.	F'ton Housing Ltd.	259 Woodbridge Street	Oct.28/69	5/8" "
110.	F'ton Housing Ltd.	230 Woodbridge Street	Oct.28/69	5/8" "
111.	F'ton Housing Ltd.	17 Surrey Crescent	Oct.29/69	3/4" "
112.	Don Wilson	10 Princess Anne Court	Oct.31/69	3/4" "
113.	Larry Hill	10 Walker Street	Nov.5/69	3/4" "
114.	Leo Brewer	753 Irvine Street	Nov.5/69	3/4" "
115.	Victory Meat Packers	Wilsey Road	Nov.6/69	6" C. I.
116.	Starlite Homes Ltd.	437 Dufferin Street	Nov.7/69	3/4" Copper
117.	Donald Hill	407 Dufferin Street	Nov.7/69	3/4" "
118.	Starlite Homes Ltd.	427 Dufferin Street	Nov.12/69	3/4" "
119.	Topmar Housing Ltd.	15 Lorne Street	Nov.13/69	3/4" "
120.	A & W Fundy Ltd.	1180 Smythe Street	Nov.13/69	1" "
121.	Topmar Housing Ltd.	9 Lorne Street	Nov.14/69	3/4" "
122.	Topmar Housing Ltd.	286 Montgomery Street	Nov.19/69	5/8" "
123.	Hill Bros.	268 Willingdon Street	Nov.20/69	3/4" "
124.	F'ton Housing Ltd.	175 Surrey Crescent	Nov.21/69	3/4" "
125.	K. W. Howlett	257 Noble Street	Nov.25/69	3/4" "
126.	Leonard Yerxa	16 Chippin Court	Dec.1/69	3/4" "
127.	F'ton Housing Ltd.	220 Woodbridge Street	Dec.2/69	5/8" "
128.	F'ton Housing Ltd.	225 Woodbridge Street	Dec.2/69	5/8" "
129.	F'ton Housing Ltd.	247 Woodbridge Street	Dec.3/69	5/8" "
130.	Leonard Yerxa	26 Chippin Court	Dec.5/69	3/4" "
131.	John Dixon	167 Colonial Heights	Dec.10/69	3/4" "
132.	L & L Realtors	358 King Street	Dec.15/69	3/4" "
* 133.	Bob Velinsky	175 Oxford St.	Aug.15/69	3/4" "

LIST OF NEW METERS      1969

<u>NO</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
1.	Kenneth Howlett	317 King's College Rd.	Jan/3/69	5/8 A.R.B.
2.	J. C. Risteen	106 Queen St.	Jan/3/69	5/8
3.	F'ton Housing Ltd.	252 Topcliffe Cres.	Jan/6/69	5/8 A.R.B.
4.	Larry Hill	40 Walker St.	Jan/7/69	5/8 A.R.B.
5.	Hill Bros.	45 Walker St.	Jan/7/69	5/8 A.R.B.
6.	J. Stanley DeLong	384-386 Smyhte St.	Jan/9/69	5/8 A.R.B.
7.	Thomas Wilson Est.	453 Highland Ave.	Jan/10/69	5/8
8.	Milton Conners	222-224 George St.	Jan/10/69	5/8
9.	Starlite Homes	30 Hearne St.	Jan/14/69	5/8 A.R.B.
10.	Radio Atlantic Ltd.	125 Hanwell Rd.	Jan/15/69	1½
11.	Mrs Harry Smith	187 Priestman St.	Jan/15/69	5/8 A.R.B.
12.	Leonard Yerxa	80 Limerick Rd.	Jan/15/69	5/8 A.R.B.
13.	F'ton Housing Ltd.	565-567 Canterbury Dr.	Jan/17/69	5/8 A.R.B.
14.	Kenneth Howlett	59 Bailey Dr.	Jan/20/69	5/8 A.R.B.
15.	Glendon G. Steeves	236 Medley St.	Jan/20/69	5/8 A.R.B.
16.	Starlite Homes Ltd.	31 Michener Ct.	Jan/22/69	5/8 A.R.B.
17.	F'ton Housing Ltd.	162 Topcliffe Cres.	Jan/24/69	5/8 A.R.B.
18.	Robert McLaughlin	769 George St.	Jan/27/69	5/8
19.	Topmar Housing Ltd.	32 Michener Ct.	Jan/30/69	5/8 A.R.B.
20.	Leo Brewer	755 Irvine St.	Jan/30/69	5/8 A.R.B.
21.	F'ton Housing Ltd.	122 Topcliffe Cres.	Feb/10/69	5/8 A.R.B.
22.	F'ton Housing Ltd.	182 Topcliffe Cres.	Feb/10/69	5/8 A.R.B.
23.	Bernard Chippin	171 Priestman St.	Feb/14/69	1
24.	Holger Mollegaard	535 Montgomery St.	Feb/20/69	5/8 A.R.B.
25.	Topmar Housing Ltd.	126 McNair Dr.	Feb/21/69	5/8 A.R.B.
26.	Topmar Housing Ltd.	130 McNair Dr.	Feb/21/69	5/8 A.R.B.
27.	Metro Builders Ltd.	380 Hanwell Rd.	Mar/3/69	5/8 A.R.B.
28.	Chippins Ltd.	517 Charlotte St. #2	Mar/4/69	5/8
29.	F'ton Housing Ltd.	205 Topcliffe Cres	Mar/4/69	5/8 A.R.B.
30.	Coates & Haines Ltd.	18 Hearne St.	Mar/14/69	5/8 A.R.B.
31.	Wayne Hill	375 Priestman St.	Mar/17/69	1
32.	Fish & Game Building	Exhibition Grounds	Mar/18/69	5/8
33.	Dept. of Indian Affairs	50 Maliseet Dr.	Mar/20/69	5/8
34.	Dept of Indian Affairs	67 Maliseet Dr.	Mar/25/69	5/8
35.	Dept. of Indian Affairs	35 Maliseet Dr.	Mar/28/69	5/8
36.	F'ton Housing Ltd.	581 Canterbury Dr.	Apr/1/69	5/8 A.R.B.
37.	F'ton Housing Ltd.	621 Canterbury Dr.	Apr/2/69	5/8 A.R.B.
38.	Roland Rickard	724 Irvine St.	Apr/24/69	5/8 A.R.B.
39.	Shell Oil Co.	Wilsey Road	May/6/69	5/8
40.	Donald Hill	330 Willingdon St.	May/13/69	5/8 A.R.B.
41.	Dept. of Indian Affairs	51 Maliseet Dr.	May/26/69	5/8
42.	Dept. of Indian Affairs	60 Maliseet Dr.	May/26/69	5/8
43.	Dept. of Indian Affairs	70 Maliseet Dr.	May/26/69	5/8
44.	U.N.B. Student Residence	780 Montgomery St.	May/28/69	1½ Tempory
45.	Dept. of Indian Affairs	77 Maliseet DR.	May/28/69	5/8
46.	F'ton Housing Ltd.	222 Topcliffe Cres,	May/29/69	5/8 A.R.B.
47.	F'ton Housing Ltd.	212 Topcliffe Cres.	May/29/69	5/8 A.R.B.
48.	F'ton Housing Ltd.	200 Surrey Cres.	May/30/69	5/8 A.R.B.
49.	F'ton Housing Ltd.	202 Topcliffe Cres.	May/30/69	5/8 A.R.B.
50.	Topmar Housing Ltd.	98 McNair Dr.	May/30/69	5/8 A.R.B.
51.	F'ton Housing Ltd.	165 Surrey Cres.	May/30/69	5/8 A.R.B.
52.	Topmar Housing Ltd.	28 Richards Ct.	June/2/69	5/8 A.R.B.
53.	David Solmon	116 McNair Dr.	June/2/69	5/8 A.R.B.
54.	Starlite Homes Ltd.	188 McNair Dr.	June/2/69	5/8 A.R.B.
55.	Starlite Homes Ltd.	170 Limerick Rd.	June/2/69	5/8 A.R.B.
56.	Topmar Housing Ltd.	20 Richards Ct.	June/3/69	5/8 A.R.B.
57.	Topmar Housing Ltd.	40 McNair Dr.	June/3/69	5/8 A.R.B.
58.	Dr. R. E. McMullin	25 Studholme St.	June/4/69	5/8 A.R.B.
59.	Topmar Housing Ltd.	38 Richards Ct.	June/4/69	5/8 A.R.B.
60.	Hill Bros.	635 Hanwell Rd.	June/4/69	5/8 A.R.B.
61.	Clearview T.V.	108 Prospect St.	June/5/69	5/8 A.R.B.
62.	F'ton Housing Ltd.	135 Surrey Cres.	June/5/69	5/8 A.R.B.
63.	Hill Bros.	92 Baley Dr.	June/6/69	5/8 A.R.B.
64.	Firestone Tire	315 Brunswick St.	June/11/69	1"
65.	Topmar Housing Ltd.	154 McNair Dr.	June/12/69	5/8 A.R.B.
66.	Topmar Housing Ltd.	180 Limerick Rd.	June/12/69	5/8 A.R.B.
67.	F'ton Housing Ltd.	20 Surrey Cres.	June/12/69	5/8 A.R.B.
68.	Starlite Homes Ltd.	41 Michener Ct.	June/13/69	5/8 A.R.B.
69.	Audio Electronics	79 Prospect St.	June/16/69	5/8
70.	Larry Hill	108 Bailey Dr.	June/17/69	5/8 A.R.B.

LIST OF NET METERS 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
71.	Larry Hill	20 Walker Street	Jun/17/69	5/8" A.R.B.
72.	Larry Hill	50 Walker Street	Jun/17/69	5/8" A.R.B.
73.	Topmar Housing Ltd.	696 Kings College Road	Jun/19/69	5/8" A.R.B.
74.	Dept. of Indian Affairs	40 Maliseet Drive	Jun/19/69	5/8"
75.	Highland Co. Ltd.	46 Cameron Court	Jun/20/69	5/8" A.R.B.
76.	Topmar Housing Ltd.	8 Hearne Street	Jun/24/69	5/8" A.R.B.
77.	Highland Co. Ltd.	26 Cameron Court	Jun/24/69	5/8" A.R.B.
78.	Wilmett Downs Raceway	Para Mutual	Jun/25/69	5/8"
79.	Arthur Wilkins	122 Lynhaven Court	Jun/26/69	5/8" A.R.B.
80.	Topmar Housing Ltd.	162 McNair Drive	Jul/2/69	5/8" A.R.B.
81.	Topmar Housing Ltd.	178 McNair Drive	Jul/2/69	5/8" A.R.B.
82.	Topmar Housing Ltd.	21 Richards Court	Jul/2/69	5/8" A.R.B.
83.	Harley Clark	761 MacLaren Avenue	Jul/2/69	5/8" A.R.B.
84.	Pederson's T.V.	364 Victoria Street	Jul/3/69	5/8"
85.	Highland Co. Ltd.	36 Cameron Court	Jul/3/69	5/8" A.R.B.
86.	Hill Bros.	281 Willingdon Street	Jul/3/69	5/8" A.R.B.
87.	Murray F. Howe	274 Medley Street	Jul/4/69	5/8" A.R.B.
88.	Starlite Homes Ltd.	22 Michener Court	Jul/7/69	5/8" A.R.B.
89.	Dept. of Indian Affairs	80 Maliseet Drive	Jul/8/69	5/8"
90.	N.B. Government Store	580 Union Street	Jul/8/69	5/8"
91.	Topmar Housing Ltd.	140 McNair Drive	Jul/8/69	5/8" A.R.B.
92.	J.H. Porter Est.	553 York Street	Jul/8/69	5/8" A.R.B.
93.	Dept. of Indian Affairs	59 Maliseet Drive	Jul/8/69	5/8"
94.	Neil Abbeau	269 Highland Avenue	Jul/9/69	5/8" A.R.B.
95.	F'ton Housing Ltd.	367 Woodbridge Street	Jul/9/69	5/8" A.R.B.
96.	Topmar Housing Ltd.	148 McNair Drive	Jul/11/69	5/8" A.R.B.
97.	F'ton Housing Ltd.	250 Woodbridge Street	Jul/11/69	5/8" A.R.B.
98.	F'ton Housing Ltd.	37 Surrey Crescent	Jul/16/69	5/8" A.R.B.
99.	F'ton Housing Ltd.	260 Woodbridge Street	Jul/17/69	5/8" A.R.B.
100.	F'ton Housing Ltd.	357 Woodbridge Street	Jul/17/69	5/8" A.R.B.
101.	Highland Co. Ltd.	155 Oxford Street	Jul/18/69	5/8" A.R.B.
102.	Topmar Housing Ltd.	49 McNair Drive	Jul/18/69	5/8" A.R.B.
103.	Fred Titus	155 Turnbull Court	Jul/22/69	5/8" A.R.B.
104.	Earle Gorden Burlock	30 Walker Street	Jul/22/69	5/8" A.R.B.
105.	Larry Hill	32 Kennedy Court	Jul/22/69	5/8" A.R.B.
106.	F'ton Housing Ltd.	680 Canterbury Drive	Jul/23/69	5/8" A.R.B.
107.	Topmar Housing Ltd.	712 Graham Avenue	Jul/23/69	5/8" A.R.B.
108.	Pumping Station # 2	Waterloo Row	Jul/24/69	1"
109.	F'ton Housing Ltd.	377 Woodbridge Street	Jul/29/69	5/8" A.R.B.
110.	Fred Galloway	970 Barker Street	Aug/5/69	5/8"
111.	Dept. of Agriculture	Exhibition Grounds	Aug/5/69	1 1/2"
112.	Miles Tire	792 McLeod Lane	Aug/6/69	1"
113.	Simpson Const.	Barker Street	Aug/11/69	5/8"
114.	Ross Doreas	203 Carney Street	Aug/12/69	5/8"
115.	U.N.B. Student Residence	780 Montgomery Street	Aug/22/69	4" Compound
116.	Abe Levine & Sons	300 Queen Street	Aug/27/69	5/8"
117.	Highland Co. Ltd.	16 Cameron Court	Aug/28/69	5/8" A.R.B.
118.	F'ton Housing Ltd.	337-339 Canterbury Drive	Aug/29/69	5/8" A.R.B.
119.	Leo Brewer	751 Irvine Street	Sept/2/69	5/8" A.R.B.
120.	Starlite Homes Ltd.	15 Michener Street	Sept/2/69	5/8" A.R.B.
121.	F'ton Housing Ltd.	653-655 Canterbury Drive	Sept/2/69	5/8" A.R.B.
122.	David Alexander	654 Beaverbrook Street	Sept/3/69	5/8" A.R.B.
123.	F'ton Housing Ltd.	669-671 Canterbury Drive	Sept/3/69	5/8" A.R.B.
124.	F'ton Housing Ltd.	270 Woodbridge Street	Sept/3/69	5/8" A.R.B.
125.	F'ton Housing Ltd.	400 Woodbridge Street	Sept/3/69	5/8" A.R.B.
126.	Hill Bros.	585 Hanwell Road	Sept/3/69	5/8" A.R.B.
127.	Larry Hill	25 Walker Street	Sept/8/69	5/8" A.R.B.
128.	Custom Builders	204 Oxford Street	Sept/8/69	5/8" A.R.B.
129.	Highland CO. Ltd.	125 Oxford Street	Sept/8/69	5/8" A.R.B.
130.	New High School	Priestman Street	Sept/8/69	1 1/2"
131.	K.W. Howlett	124 Grey Street	Sept/10/69	5/8" A.R.B.
132.	Custom Builders	174 Colonial Heights	Sept/10/69	5/8" A.R.B.
133.	F'ton Housing Ltd.	380 Woodbridge Street	Sept/22/69	5/8" A.R.B.
134.	F'ton Housing Ltd.	285 Woodbridge Street	Sept/22/69	5/8" A.R.B.
135.	F'ton Housing Ltd.	290 Woodbridge Street	Sept/22/69	5/8" A.R.B.
136.	F'ton Housing Ltd.	325 Woodbridge Street	Sept/23/69	5/8" A.R.B.
137.	Harold Bamford	27 Surrey Crescent	Sept/23/69	5/8" A.R.B.
138.	S.C.R. Construction	218 Colonial Heights	Sept/23/69	5/8" A.R.B.
139.	Topmar Housing Ltd.	715 Forest Hill Road	Sept/25/69	5/8" A.R.B.
140.	U.N.B. Forestry Bldg.	U.N.B. Campus	Sept/26/69	3" Rockwell

LIST OF NEW METERS 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
141.	F'ton Housing Ltd.	387 Woodbridge Street	Oct/2/69	5/8" A.R.B.
142.	Wayne Hill	517-527 Priestman Street	Oct/3/69	11/2"
143.	Leo Cain	272 Regent Street	Oct/6/69	5/8" A.R.B.
144.	George Whittaker	642 Scully Street	Oct/6/69	5/8" A.R.B.
145.	St. Mary's Church Hall	780 McEvoy Street	Oct/6/69	1" A.R.B.
146.	Donald Hill	50 Golf Club Road	Oct/14/69	5/8" A.R.B.
147.	Pearl Gorden Est.	229 Dundonald Street	Oct/18/69	5/8" A.R.B.
148.	F'ton Housing Ltd.	397 Woodbridge Street	Oct/15/69	5/8" A.R.B.
149.	F'ton Housing Ltd.	370 Woodbridge Street	Oct/16/69	5/8" A.R.B.
150.	F'ton Housing Ltd.	345 Woodbridge Street	Oct/16/69	5/8" A.R.B.
151.	F'ton Housing Ltd.	340 Woodbridge Street	Oct/16/69	5/8" A.R.B.
152.	F'ton Housing Ltd.	280 Woodbridge Street	Oct/16/69	5/8" A.R.B.
153.	Leonard Yerxa	881 Grandame Street	Nov/5/69	5/8" A.R.B.
154.	Hill Bros.	214 Willingdon Street	Nov/5/69	5/8" A.R.B.
155.	Starlite Homes Ltd.	414 Dufferin Street	Nov/5/69	5/8" A.R.B.
156.	Morrison's Offices	51 York Street	Nov/20/69	5/8"
157.	Hogans Jewel	392 Queen Street	Nov/20/69	5/8"
158.	Record Album	396 Queen Street	Nov/20/69	5/8"
159.	F'ton Housing Ltd.	273 Woodbridge Street	Nov/27/69	5/8" A.R.B.
160.	Chippins Jewel	400 Queen Street	Nov/20/69	5/8"
161.	F'ton Housing Ltd.	295 Woodbridge Street	Dec/3/69	5/8" A.R.B.
162.	Wilfred Gorman	276 King Street	Dec/3/69	5/8"
163.	F'ton Housing Ltd.	405 Woodbridge Street	Dec/4/69	5/8" A.R.B.
164.	Topmar Housing Ltd	Industrial Park	Dec/12/69	5/8" A.R.B.
165.	F'ton Housing Ltd.	259 Woodbridge Street	Dec/15/69	5/8" A.R.B.
166.	F'ton Housing Ltd.	309 Woodbridge Street	Dec/15/69	5/8" A.R.B.
167.	G. Lumsden	122 Miles Street	Dec/17/69	5/8" A.R.B.
168.	Larry Hill	10 Walker Street	Dec/17/69	5/8" A.R.B.
169.	Hill Bros.	269 Willingdon Street	Dec/17/69	5/8" A.R.B.
170.	F'ton Housing Ltd.	230 Woodbridge Street	Dec/17/69	5/8" A.R.B.
171.	F'ton Housing Ltd.	240 Woodbridge Street	Dec/17/69	5/8" A.R.B.
172.	Hill Bros.	274 Willingdon Street	Dec/18/69	5/8" A.R.B.
173.	Starlite Homes	437 Dufferin Street	Dec/18/69	5/8" A.R.B.
174.	Starlite Homes	427 Dufferin Street	Dec/18/69	5/8" A.R.B.
175.	Starlite Homes	406 Dufferin Street	Dec/19/69	5/8" A.R.B.
176.	Masonic Lodge	125 Prospect Street	Dec/19/69	5/8" A.R.B.
177.	Simpson Const.	Barker Street	Dec/22/69	3" Rockwell
178.	Maurice Sacobie	145 Bridge Street	Dec/22/69	5/8"
179.	Hill Bros.	665 Hanwell Road	Dec/22/69	5/8" A.R.B.
180.	Dept of Indian Affairs	87 Sappier Street	Dec/22/69	5/8"
181.	F'ton Housing Ltd.	17 Surrey Crescent	Dec/24/69	5/8" A.R.B.
182.	Mrs L.P. Long Est.	141 Neill Street	Dec/29/69	5/8" A.R.B.
183.	Leonard Yerxa	16 Chippin Court	Dec/30/69	5/8" A.R.B.
184.	Don Wilson	10 Princess Anne Court	Dec/31/69	5/8" A.R.B.
185.	Hill Bros.	268 Willingdon Street	Dec/31/69	5/8" A.R.B.

A.R.B. METER INSTALLATION RECORDS 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
1.	Kenneth Howlett	317 King's College Rd.	Jan/3/69	5/8 A.R.B.
2.	F'ton Housing Ltd.	252 Topcliffe Cres.	Jan/6/69	5/8 A.R.B.
3.	Larry Hill	40 Walker St.	Jan/7/69	5/8 A.R.B.
4.	Hill Bros.	45 Walker St.	Jan/7/69	5/8 A.R.B.
5.	F. L. Williams	132 Argyle St.	Jan/8/69	5/8 A.R.B.
6.	Mrs Alfred Perry	234 Argyle St.	Jan/8/69	5/8 A.R.B.
7.	J. G. Phillips	767 Mitchell St.	Jan/8/69	5/8 A.R.B.
8.	Lester Richards	245 Stanley Street	Jan/8/69	5/8 A.R.B.
9.	Aaron Brody	164 Aberdeen St.	Jan/9/69	5/8 A.R.B.
10.	Miss J. Mazzuca	762 Churchill Row	Jan/9/69	5/8 A.R.B.
11.	J. Stanley DeLong	384-386 Smythe St.	Jan/9/69	5/8 A.R.B.
12.	Mrs. M. A. Clair	482 Charlotte St.	Jan/13/69	5/8 A.R.B.
13.	Miss M. George	294 Queen St.	Jan/13/69	5/8 A.R.B.
14.	Keith M. Wilson	546 King St.	Jan/14/69	5/8 A.R.B.
15.	David Kileel	286-288 Queen St.	Jan/14/69	5/8 A.R.B.
16.	Starlite Homes Ltd.	30 Hearne St.	Jan/14/69	5/8 A.R.B.
17.	Lorne Little	108-110 Brunswick St.	Jan/15/69	5/8 A.R.B.
18.	Mrs Harry Smith	187 Priestman St.	Jan/15/69	5/8 A.R.B.
19.	Leonard Yerxa	80 Limerick Rd.	Jan/15/69	5/8 A.R.B.
20.	Irvine Saunders	683-685 Union St.	Jan/16/69	5/8 A.R.B.
21.	Ross Hopkins	711-713 Union St.	Jan/16/69	5/8 A.R.B.
22.	Gorden F. Cosman	709 Union St.	Jan/16/69	5/8 A.R.B.
23.	Mrs Queenie Taylor	432 Union St.	Jan/17/69	5/8 A.R.B.
24.	Thomas Gough	357-359 Saunders St.	Jan/17/69	5/8 A.R.B.
25.	F'ton Housing Ltd.	565-567 Canterbury Dr.	Jan/17/69	5/8 A.R.B.
26.	Kenneth Howlett	59 Bailey Dr.	Jan/20/69	5/8 A.R.B.
27.	Robert Dobie	733-735 Prince St.	Jan/21/69	5/8 A.R.B.
28.	Willis B. Foster	242 Medley St.	Jan/21/69	5/8 A.R.B.
29.	Mrs A. Chaters	749 MacLaren Ave.	Jan/21/69	5/8 A.R.B.
30.	Starlite Homes Ltd.	31 Michener Ct.	Jan/22/69	5/8 A.R.B.
31.	Herbert H. Colwell	222 Gibson St.	Jan/23/69	5/8 A.R.B.
32.	Mrs. Gladys Fletcher	539 Union St.	Jan/23/69	5/8 A.R.B.
33.	F'ton Housing Ltd.	162 Topcliffe Cres.	Jan/24/69	5/8 A.R.B.
34.	C. W. Gross	748 Forest Hill	Jan/28/69	5/8 A.R.B.
35.	Douglas G. Embree	112 Topcliffe Cres.	Jan/28/69	5/8 A.R.B.
36.	Topmar Housing Ltd.	32 Michener Ct.	Jan/30/69	5/8 A.R.B.
37.	Leo Brewer	755 Irvine St.	Jan/30/69	5/8 A.R.B.
38.	F'ton Housing Ltd.	122 Topcliffe Cres.	Feb/10/69	5/8 A.R.B.
39.	F'ton Housing Ltd.	182 Topcliffe Cres.	Feb/10/69	5/8 A.R.B.
40.	Holger Mollegaard	535 Montgomery St.	Feb/20/69	5/8 A.R.B.
41.	Topmar Housing Ltd.	126 McNair Dr.	Feb/21/69	5/8 A.R.B.
42.	Topmar Housing Ltd.	130 McNair Dr.	Feb/21/69	5/8 A.R.B.
43.	Metro Builders Ltd.	380 Hanwell Rd.	Mar/3/69	5/8 A.R.B.
44.	F'ton Housing Ltd.	205 Topcliffe Cres.	Mar/4/69	5/8 A.R.B.
45.	Coates & Haines Ltd.	18 Hearne St.	Mar/14/69	5/8 A.R.B.
46.	F'ton Housing Ltd.	581 Canterbury Dr.	Apr/1/69	5/8 A.R.B.
47.	F'ton Housing Ltd.	621 Canterbury Dr.	Apr/2/69	5/8 A.R.B.
48.	Mrs Bessie Brown	458 Needham St.	Apr/24/69	5/8 A.R.B.
49.	Mrs Evelyn Prince	466 Needham St.	Apr/24/69	5/8 A.R.B.
50.	Mrs Angus McBean	469 Needham St.	Apr/24/69	5/8 A.R.B.
51.	Roland Rickard	724 Irvine St.	Apr/25/69	5/8 A.R.B.
52.	Norval E. Clark	474-476 Needham St.	Apr/25/69	5/8 A.R.B.
53.	Mrs Bessie Brown	449-451 Needham St.	Apr/25/69	5/8 A.R.B.
54.	Murdock P. Bowes	509 Needham St.	Apr/25/69	5/8 A.R.B.
55.	Murdock P. Bowes	515 Needham St.	Apr/25/69	5/8 A.R.B.
56.	Donald Hill	330 Willingdon St.	May/13/69	5/8 A.R.B.
57.	Mrs K. Britton	853 George St.	May/22/69	5/8 A.R.B.
58.	F'ton Housing Ltd.	222 Topcliffe Cres.	May/29/69	5/8 A.R.B.
59.	F'ton Housing Ltd.	212 Topcliffe Cres.	May/29/69	5/8 A.R.B.
60.	F'ton Housing Ltd.	200 Surrey Cres.	May/30/69	5/8 A.R.B.
61.	F'ton Housing Ltd.	202 Topcliffe Cres.	May/30/69	5/8 A.R.B.
62.	Topmar Housing Ltd.	98 McNair Dr.	May/30/69	5/8 A.R.B.
63.	F'ton Housing Ltd.	165 Surrey Cres.	May/30/69	5/8 A.R.B.
64.	Topmar Housing Ltd.	28 Richards Ct.	June/2/69	5/8 A.R.B.
65.	David Solman	116 McNair Dr.	June/2/69	5/8 A.R.B.
66.	Starlite Homes Ltd.	188 McNair Dr.	June/2/69	5/8 A.R.B.
67.	Starlite Homes Ltd.	170 Limerick Rd.	June/2/69	5/8 A.R.B.
68.	Topmar Housing Ltd.	20 Richards Ct.	June/3/69	5/8 A.R.B.
69.	Topmar Housing Ltd.	40 McNair Dr.	June/3/69	5/8 A.R.B.
70.	Dr. R. McMullin	25 Studholme ST.	June/4/69	5/8 A.R.B.

## A.R.B. METER INSTALLATION RECORD

1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
71.	Topmar Housing Ltd.	38 Richards Ct.	June/4/69	5/8 A.R.B.
72.	Hill Bros.	635 Hanwell Rd.	June/4/69	5/8 A.R.B.
73.	T. J. Bourque	261 Carney St.	June/5/69	5/8 A.R.B.
74.	Mrs. G. Abernathy	697 Union Street	June/6/69	5/8 A.R.B.
75.	John A. Comeau	716 Union St.	June/6/69	5/8 A.R.B.
76.	Hill Bros.	92 Bailey Dr.	June/6/69	5/8 A.R.B.
77.	Dept. of Public Works	706 Brunswick St.	June/9/69	5/8 A.R.B.
78.	Riverview Arms Tavern	721 Waterloo Row	June/9/69	5/8 A.R.B.
79.	Charles G. Allen	468 Hanwell Rd.	June/9/69	5/8 A.R.B.
80.	Oliver Lewis	544 Canterbury Dr.	June/9/69	5/8 A.R.B.
81.	J. Gorden Neill	838 Brunswick Street	June/10/69	5/8 A.R.B.
82.	Mrs Emma O'Leary	848 Brunswick St.	June/10/69	5/8 A.R.B.
83.	Herbert Kitchen	123 Grey St.	Junell/69	5/8 A.R.B.
84.	F. O. Creighton	87 Golf Club Rd.	June/11/69	5/8 A.R.B.
85.	Topmar Housing Ltd.	154 McNair Dr.	June/12/69	5/8 A.R.B.
86.	Topmar Housing Ltd.	180 Limerick Rd.	June/12/69	5/8 A.R.B.
87.	F'ton Housing Ltd.	20 Surrey Cres.	June/12/69	5/8 A.R.B.
88.	Starlite Homes	41 Michener Ct.	June/13/69	5/8 A.R.B.
89.	Rusco Windows of N.B.	25 Prospect St.	June/6/69	5/8 A.R.B.
90.	Larry Hill	108 Bailey Dr.	June/17/69	5/8 A.R.B.
91.	Larry Hill	20 Walker St.	June/17/69	5/8 A.R.B.
92.	Larry Hill	50 Walker St.	June/17/69	5/8 A.R.B.
93.	Topmar Housing Ltd.	696 King's College Rd.	June/19/69	5/8 A.R.B.
94.	Highland Co. Ltd.	46 Cameron Ct.	June/20/69	5/8 A.R.B.
95.	Topmar Housing Ltd.	8 Hearne Street	June/24/69	5/8 A.R.B.
96.	Highland Co. Ltd.	26 Cameron Ct.	June/24/69	5/8 A.R.B.
97.	Mrs. Yvette Breau	478 Union St.	June/24/69	5/8 A.R.B.
98.	Michael Barron	468-470 Water St.	June/24/69	5/8 A.R.B.
99.	Joseph Barry	899 Barker St.	June/25/69	5/8 A.R.B.
100.	Evangel Pentecostal Ass.	143 Neill St.	June/25/69	5/8 A.R.B.
101.	A. C. Haining	126 St. Mary's St.	June/26/69	5/8 A.R.B.
102.	Rosser Sales	St. Mary's St.	June/26/69	5/8 A.R.B.
103.	Kingdom Hall	138 Neill St.	June/26/69	5/8 A.R.B.
104.	Arthur Wilkins	122 Lynhaven St.	June/26/69	5/8 A.R.B.
105.	Seventh Day Church	528 MacLaren Ave.	June/26/69	5/8 A.R.B.
106.	Topmar Housing Ltd.	162 McNair Dr.	Jul/2/69	5/8 A.R.B.
107.	Topmar Housing Ltd.	178 McNair DR.	Jul/2/69	5/8 A.R.B.
108.	Topmar Housing Ltd.	21 Richards Ct.	Jul/2/69	5/8 A.R.B.
109.	Highland Co. Ltd.	36 Cameron Ct.	Jul/3/69	5/8 A.R.B.
110.	Hill Bros.	281 Willingdon St.	Jul/3/69	5/8 A.R.B.
111.	Murray F. Howe	274 Medley St.	Jul/4/69	5/8 A.R.B.
112.	Wm. Howard Moore	88 Wilsey Rd.	Jul/7/69	5/8 A.R.B.
113.	Mrs Harry Peterson	94 Wilsey Rd.	Jul/7/69	5/8 A.R.B.
114.	Arthur MacKenzie	102 Wilsey Rd.	Jul/7/69	5/8 A.R.B.
115.	Topmar Housing Ltd.	140 McNair Dr.	Jul/8/69	5/8 A.R.B.
116.	Miss G. Hallett	220 Carleton St.	Jul/8/69	5/8 A.R.B.
117.	J. H. Porter Est.	553 York St.	Jul/8/69	5/8 A.R.B.
118.	Neil Arbeau	269 Highland Ave.	Jul/9/69	5/8 A.R.B.
119.	F'ton Housing Ltd.	367 Woodbridge St.	Jul/9/69	5/8 A.R.B.
120.	Topmar Housing Ltd.	148 McNair Dr.	Jul/11/69	5/8 A.R.B.
121.	F'ton Housing Ltd.	250 Woodbridge St.	Jul/11/69	5/8 A.R.B.
122.	Jessie Parent	684 Graham Ave.	Jul/14/69	5/8 A.R.B.
123.	Leachmans Plumbing	127 Gibson St.	Jul/14/69	5/8 A.R.B.
124.	W. H. Sullivan	668 Priestman St.	Jul/14/69	5/8 A.R.B.
125.	Mrs. M. E. Wilson	330 Church St.	Jul/15/69	5/8 A.R.B.
126.	Arthur Goodwin	292 St. John Street	Jul/15/69	5/8 A.R.B.
127.	Mrs. H. Folkins	671 Aberdeen St.	Jul/15/69	5/8 A.R.B.
128.	Victor Black	259 Aberdeen St.	Jul/16/69	5/8 A.R.B.
129.	F'ton Housing Ltd.	37 Surrey Cres.	Jul/16/69	5/8 A.R.B.
130.	Earle Parent	855 Smythe St.	Jul/17/69	5/8 A.R.B.
131.	Sterling Parent	865 Smythe St.	Jul/17/69	5/8 A.R.B.
132.	F'ton Housing Ltd.	260 Woodbridge St.	Jul/17/69	5/8 A.R.B.
133.	F'ton Housing Ltd.	357 Woodbridge St.	Jul/17/69	5/8 A.R.B.
134.	Rabbi David Spiro	463 Waterloo Row	Jul/18/69	5/8 A.R.B.
135.	Highland Co. Ltd.	155 Oxford St.	Jul/18/69	5/8 A.R.B.
136.	Topmar Housing Ltd.	49 McNair Dr.	Jul/18/69	5/8 A.R.B.
137.	Mrs Ethel MacDonald	750 Union St.	Jul/19/69	5/8 A.R.B.
138.	George Moore	304 Lincoln Rd.	Jul/21/69	5/8 A.R.B.
139.	James Dugan Est.	630 Scully St.	Jul/21/69	5/8 A.R.B.
140.	Matilda Hughes Est.	543 Union St.	Jul/21/69	5/8 A.R.B.

A.R.B. METER INSTALLATION RECORD 1969

NO.	NAME	ADDRESS	DATE	SIZE
141.	Mr. Merle Burse	240 Argyle Street	Jul/21/69	5/8" A.R.B.
142.	Larry Hill	32 Kennedy Court	Jul/22/69	5/8" A.R.B.
143.	Fred Titus	155 Turnbull Court	Jul/22/69	5/8" A.R.B.
144.	Earle G. Burlock	30 Walker Street	Jul/22/69	5/8" A.R.B.
145.	F'ton Housing Ltd.	680 Canterbury Drive	Jul/23/69	5/8" A.R.B.
146.	Topmar Housing Ltd.	712 Graham Avenue	Jul/23/69	5/8" A.R.B.
147.	Jeff Howard Real Estate	542-544 George Street	Jul/24/69	5/8" A.R.B.
148.	Miss I. Hill	24 Waterloo Row	Jul/24/69	5/8" A.R.B.
149.	Rabbi David Spiro	280 Westmorland Street	Jul/24/69	5/8" A.R.B.
150.	Diocesan Synod of F'ton	469 Waterloo Row	Jul/25/69	5/8" A.R.B.
151.	Mrs. Gorden Saunders	452-454 Needham Street	Jul/25/69	5/8" A.R.B.
152.	Mrs. K. Logan	125 King Street	Jul/28/69	5/8" A.R.B.
153.	Ralph Dingee	128 King Street	Jul/28/69	5/8" A.R.B.
154.	James Murphy	148 St. Mary's Street	Jul/28/69	5/8" A.R.B.
155.	F'ton Housing Ltd.	377 Woodbridge Street	Jul/29/69	5/8" A.R.B.
156.	Murrary Calvert Est.	551 Needham Street	Jul/29/69	5/8" A.R.B.
157.	Highland Co.	16 Cameron Court	Aug/28/69	5/8" A.R.B.
158.	F'ton Housing Ltd.	637-639 Canterbury Drive	Aug/29/69	5/8" ARR.B.
159.	Leo Brewer	751 Irvine Street	Sept/2/69	5/8" A.R.B.
160.	Starlite Homes	15 Michener Court	Sept/2/69	5/8" A.R.B.
161.	F'ton Housing Ltd.	653-655 Canterbury Drive	Sept/2/69	5/8" A.R.B.
162.	David Alexander	654 Beaverbrook Street	Sept/3/69	5/8" A.R.B.
163.	F'ton Housing Ltd.	669-771 Canterbury Drive	Sept/3/69	5/8" A.R.B.
164.	F'ton housing Ltd.	270 Woodbridge Street	Sept/3/69	5/8" A.R.B.
165.	F8ton Housing Ltd.	400 Woodbridge Street	Sept/3/69	5/8" A.R.B.
166.	Hill Bros.	585 Hanwell Road	Sept/3/69	5/8" A.R.B.
167.	Larry Hill	25 Walker Street	Sept/8/69	5/8" A.R.B.
168.	Custom Builders	204 Oxford Street	Sept/8/69	5/8" A.R.B.
169.	Highland Co.	125 Oxford Street	Sept/8/69	5/8" A.R.B.
170.	K. W. Howlett	124 Grey Street	Sept/10/69	5/8" A.R.B.
171.	Custom Builders	174 Colonial Heights	Sept/10/69	5/8" A.R.B.
172.	F8ton Housing Ltd.	380 Woodbridge Street	Sept/22/69	5/8" A.R.B.
173.	F'ton Housing Ltd.	285 Woodbridge Street	Sept/22/69	5/8" A.R.B.
174.	F'ton Housing Ltd.	290 Woodbridge Street	Sept/22/69	5/8" A.R.B.
175.	F'ton Housing Ltd.	325 Woodbridge Street	Sept/23/69	5/8" A.R.B.
176.	Harold Bamford	27 Surrey Crescent	Sept/23/69	5/8" A.R.B.
177.	S.C.R. Construction	218 Colonial Heights	Sept/23/69	5/8" A.R.B.
178.	Ralph Clark	260-262 St. John St.	Sept/24/69	5/8" A.R.B.
179.	David McGlion	648 Phillips Street	Sept/24/69	5/8" A.R.B.
180.	Jude Melanson	753 Athlone Street	Sept/24/69	5/8" A.R.B.
181.	Mrs B. Stewart	309 Gibson Street	Sept/24/69	5/8" A.R.B.
182.	Topmar Housing Ltd.	715 Forest Hill	Sept/25/69	5/8" A.R.B.
183.	Ross Dorcas	203 Carney Street	Sept/25/69	5/8" A.R.B.
184.	J.P. Farrell Est.	301 York Street	Sept/25/69	5/8" A.R.B.
185.	Diocesan Synod of F'ton	791 Brunswick Street	Sept/25/69	5/8" A.R.B.
186.	Mrs E. Savoie	661 Elizabeth Street	Sept/25/69	5/8" A.R.B.
187.	Aart Kranendonk	176 Pine Street	Sept/26/69	5/8" A.R.B.
188.	Henry Gilbert	185 Pine Street	Sept/26/69	5/8" A.R.B.
189.	Prof. R.N. Scott	768 Hanson Street	Sept/26/69	5/8" A.R.B.
190.	Mrs T.W. Jones	627 Scully Street	Oct/1/69	5/8" A.R.B.
191.	F'ton Housing Ltd.	387 Woodbridge Street	Oct/2/69	5/8" A.R.B.
192.	Dr. Ella Good	242 Regent Street	Oct/3/69	5/8" A.R.B.
193.	Dr. Ella Good	611 Charlotte Street	Oct/3/69	5/8" A.R.B.
194.	Leo Cain	272 Regent Street	Oct/6/69	5/8" A.R.B.
195.	George Whittaker	642 Scully Street	Oct/6/69	5/8" A.R.B.
196.	St. Mary's Church Hall	780 McEvoy Street	Oct/6/69	1" A.R.B.
197.	Donald Hill	50 Golf Club Road	Oct/14/69	5/8" A.R.B.
198.	Pearl Gordean Est.	229 Dundonald Street	Oct/15/69	5/8" A.R.B.
199.	F'ton Housing Ltd.	397 Woodbridge Street	Oct/15/69	5/8" A.R.B.
200.	F'ton Housing Ltd.	370 Woodbridge Street	Oct/16/69	5/8" A.R.B.
201.	F'ton Housing Ltd.	345 Woodbridge Street	Oct/16/69	5/8" A.R.B.
202.	F'ton Housing Ltd.	340 Woodbridge Street	Oct/16/69	5/8" A.R.B.
203.	F'ton Housing Ltd.	280 Woodbridge Street	Oct/16/69	5/8" A.R.B.
204.	Mrs M. McNair	749 Churchill Row	Oct/17/69	5/8" A.R.B.
205.	Mrs M. McNair	767 Churchill Row	Oct/17/69	5/8" A.R.B.
206.	Knicol Inc.	357 George Street	Oct/20/69	5/8" A.R.B.
207.	Abe Levine & Sons	165 Brunswick Street	Oct/20/69	5/8" A.R.B.
208.	Abe Levine & Sons	163 Brunswick Street	Oct/20/69	5/8" A.R.B.
209.	C.E. Leslie Est.	617 Scully Street	Oct/22/69	5/8" A.R.B.
210.	R. Dickinson Reality	267-269 George Street	Oct/23/69	5/8" A.R.B.

A.R.B. METER INSTALLATION RECORD 1969

<u>NO.</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>DATE</u>	<u>SIZE</u>
211.	R. Dickinson Reality	273-275 George Street	Oct /23/69	5/8" A.R.B.
212.	J. DiGiacinto	795 Hanson Street	Nov/3/69	5/8" A.R.B.
213.	Leonard Yerxa	881 Grandame Street	Nov/5/69	5/8" A.R.B.
214.	Hill Bros	214 Willingdon Street	Nov/25/69	5/8" A.R.B.
215.	Starlite Homes	414 Dufferin Street	Nov/5/69	5/8" A.R.B.
216.	F'ton Housing Ltd.	273 Woodbridge Street	Nov/27/69	5/8" A.R.B.
217.	F'ton Housing Ltd.	295 Woodbridge Street	Dec/3/69	5/8" A.R.B.
218.	F'ton Housing Ltd.	405 Woodbridge Street	Dec/4/69	5/8" A.R.B.
219.	Bernard Anthony	680 Dobie Street	Dec/11/69	5/8" A.R.B.
220.	Mrs. Nellie Briggs	338 George Street	Dec/11/69	5/8" A.R.B.
221.	Topmar Housing Ltd.	Industrial Park	Dec/12/69	5/8" A.R.B.
222.	F'ton Raceway( Barn )	Exhibition Grounds	Dec/15/69	1" A.R.B.
223.	Allan Rosborough	174 Northumberland Street	Dec/15/69	5/8" A.R.B.
224.	F'ton Housing Ltd.	259 Woodbridge Street	Dec/15/69	5/8" A.R.B.
225.	F'ton Housing Ltd.	309 Woodbridge Street	Dec/15/69	5/8" A.R.B.
226.	G. Lumsden	122 Miles Street	Dec/17/69	5/8" A.R.B.
227.	Larry Hill	10 Walker Street	Dec/17/69	5/8" A.R.B.
228.	Hill Bros.	269 Willingdon Street	Dec/17/69	5/8" A.R.B.
229.	F'ton Housing Ltd.	230 Woodbridge Street	Dec/17/69	5/8" A.R.B.
230.	F'ton Housing Ltd.	240 Woodbridge Street	Dec/17/69	5/8" A.R.B.
231.	Hill Bros.	274 Willingdon Street	Dec/18/69	5/8" A.R.B.
232.	Starlite Homes Ltd.	437 Dufferin Street	Dec/18/69	5/8" A.R.B.
233.	Starlite Homes Ltd.	427 Dufferin Street	Dec/18/69	5/8" A.R.B.
234.	Starlite Homes Ltd.	406 Dufferin Street	Dec/19/69	5/8" A.R.B.
235.	Masonic Lodge	125 Prospect Street	Dec/19/69	5/8" A.R.B.
236.	Hill Bros.	665 Hanwell Road	Dec/22/69	5/8" A.R.B.
237.	L. W. Anderson	582-584 Charlotte Street	Dec/23/69	5/8" A.R.B.
238.	Eric Garland	806 Hanson Street	Dec/23/69	5/8" A.R.B.
239.	Mrs. Violet Nesbitt	623 Windsor Street	Dec/23/69	5/8" A.R.B.
240.	F'ton Housing Ltd.	17 Surrey Crescent	Dec/24/69	5/8" A.R.B.
241.	Mrs. L. P. Long Est.	141 Neill Street	Dec/29/69	5/8" A.R.B.
242.	Connaught St. School	Connaught Street	Dec/30/69	2" A.R.B.
243.	Mrs Helen Barnes	450 Albert Street	Dec/30/69	5/8" A.R.B.
244.	C. D. Dow	358 Canterbury Drive	Dec/30/69	5/8" A.R.B.
245.	Leonard Yerxa	16 Chippin Court	Dec/30/69	5/8" A.R.B.
246.	Hill Bros.	268 Willingdon Street	Dec/31/69	5/8" A.R.B.
247.	Don Wilson	10 Princess Anne Court	Dec/31/69	5/8" A.R.B.

## WATER RELAYS 1969

NO.	NAME	ADDRESS	DATE	SIZE
1.	Harold Bird	748 Coombs St.	May 4/69	3/4" Copper
2.	L & L Realtors	358 King St.	May 13/69	3/4" Copper
3.	H. H. Walls	348 St. Mary's St.	June 6/69	3/4" Copper
4.	Aaron Brody	517 Charlotte St.	Sept.10/69	3/4" Copper
5.	Central Trust Ltd.	190 Brunswick St.	Sept.15/69	3/4" Copper
6.	Abner Belyea	321 Queen St.	Sept.23/69	3/4" Copper
7.	Fred Coperthwaite	303 Gibson St.	Oct.2/69	3/4" Copper
8.	Mrs. Charles Pond	725 Brunswick St.	Oct.15/69	3/4" Copper
9.	Lee B. Greene	235 Church St.	Oct.31/69	3/4" Copper
10.	William Quigg	544 Brunswick St.	Nov.27/69	5/8" Copper
11.	Mrs. Anetta Kaine	358 Gibson St.	Nov.28/69	5/8" Copper
12.	Walter Cumming	40 Brunswick St.	Dec.1/69	3/4" Copper

THE CITY OF  
FREDERICTON & VICINITY

Scale: 1:1000

**CONSTRUCTION 1969**

SURFACE SEWER

DOMESTIC SEWER

WATER

	DOMESTIC SEWER										WATER				
	36"	24"	18"	15"	12"	10"	18"	12"	10"	8"	12"	10"	8"	6"	4"
800	350	1375	4592	4430	2048	1110	601	1465	10161	3060	2065	2427	5645	748	

6" FORCE MAIN - 1280 FEET.

UNIVERSITY OF NEW BRUNSWICK WOODLOT  
AND GAME REFUGE

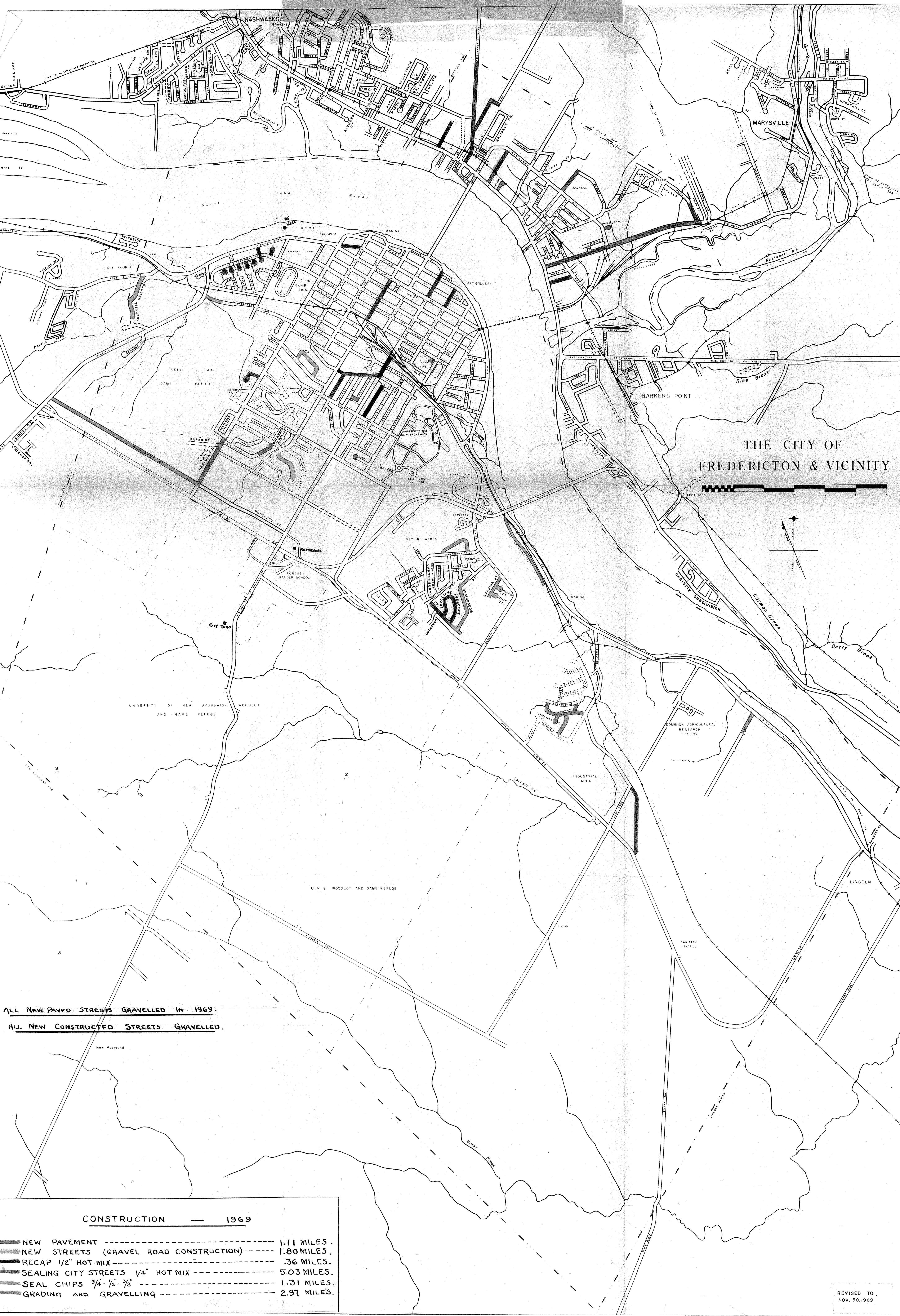
CANADIAN AGRICULTURAL  
RESEARCH STATION

REVISED NOV. 1969

**THE CITY OF  
FREDERICTON & VICINITY**

Scale: 1 mile = 5 miles

1 2 3 4 5



THE CITY OF  
FREDERICTON & VICINITY

CONSTRUCTION 1969

— Curb & Gutter  
— Concrete Walks

3.68 MILES  
2.23 MILES

UNIVERSITY OF NEW BRUNSWICK WOODLOT  
AND GAME REFUGE

DOMINION AGRICULTURAL  
RESEARCH STATION

INDUSTRIAL AREA

REVISED NOV. 1969