

ANNUAL REPORT OF THE ENGINEERING AND PUBLIC WORKS DEPARTMENT

1966



I N D E XP A G E

	<u>P A G E</u>
Letter of Transmittal	1
Total Yearly Expenditure	4
Administration of Justice	60
Capital Account Centennial Projects	40
Odell Park Centennial	41
Centennial Park, Carleton Ward	42
Capital Account Curb and Gutter	23
Capital Account Domestic Sewer	27 - 29
Capital Account Forest Hill Access Road	40
Capital Account Gravel Roads	38 - 39
Capital Account Industrial Area	42 - 43
Capital Account Paving	24 - 27
Capital Account Surface Sewer	30 - 32
Capital Account Traffic Lights	44
Capital Account Water	33 - 37
Drilling and Testing Cameron Court Well ...	35
Construction of Pump House, Supply and Installation of Equipment - Cameron Court	36
Construction of Reservoir - Hanwell Road ..	36
Water Exploration - 1966	36 - 37
Carleton Park	52
Cement Walks	57
Centennial Committee	64
City Hall	54
Clark, J. T. Memorial Building	61
Clearing Park Areas	53
Contingent	61 - 62
Domestic Sewer	55
Fire Department	56
Local Improvement	44 - 45
Loyalist Burial Ground	61
Municipal Home	63
Municipal Parking Lots	62 - 63
Odell Park	50 - 52
Old Burial Ground	56
Public Works	46 - 50
Recreation	53 - 54
Roads and Streets	5 - 21
Sanitation	58 - 60
Street Lights	65 - 69
Tourist and Industry	63 - 64
Water	70 - 74
Water Ordinary	70 - 72
Hydrants	72
Meters	72 - 74
Distribution System	73
Water Pumping Station	75 - 78
Wilmot Park	53
Winter Works Program	22
York Arena	64
Report of E. W. Hagerman, City Analyst	79 - 83

TO HIS WORSHIP THE MAYOR AND ALDERMEN
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, 1966 to December 31, 1966 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.....	4.28 miles
Concrete Sidewalk	1.78 miles
Grading and Gravelling City Streets	4.00 miles
Ditching25 miles
New Street Construction	1.36 miles

New Pavement $\frac{3}{4}$ " Dense Mix
(Diamond Construction Co. (1961) Ltd.). 4.80 miles

Recap ($\frac{1}{2}$ " Hot Mix) 1.37 miles

Sealing City Streets
(Diamond Construction Co. (1961) Ltd)
 $\frac{1}{4}$ " Hot Mix 6.29 miles

Armour Coat ($3/8$ " - $1/2$ " - $3/4$ ")..... 1.83 miles

10" - 60" Surface Sewers 1.86 miles
8" Domestic Sewer 1.71 miles
6" - 8" C. I. Water Pipe 1.94 miles

Contractors under contract with the Public Works Department of the City of Fredericton in 1966 constructed or began construction on the following projects:-

- | | |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Ashfield Construction Company Limited | - To installing Domestic Sewer, Surface Sewer and Water on Stanley and Willingdon Streets (Hill Bros. Subdivision). |
| Ashfield Construction Company Limited | - To installing Domestic Sewer and Water on Hanwell Road. |
| Ashfield Construction | - To installing Domestic Sewer, Surface Sewer and Water on Cameron Court and extending Water Main to new Reservoir on Hanwell Road. |
| Canada Gunite Limited | - To construction of 100,000 Imperial Gallon Prestressed Concrete Water Reservoir on Hanwell Road. |

- Everett Farris - To installing Domestic Sewer, Surface Sewer and Water on Grandame Street and completion of Domestic Sewer, Surface Sewer and Water on Gregg Court. (Chippin Subdivision).
- Fredericton Housing Ltd. - To construction of Brick Pump House to house Pumping Equipment for new well on Cameron Court.
- International Water Supply Company - To supply and installation of Pumping Equipment for Pump House on Cameron Court.
- Forbes and Sloat - Supply and delivery of crushed gravel.
- Diamond Construction Company (1961) Ltd. - To laying of Asphalt pavement and chips on various streets in the City of Fredericton.
- W. R. and W. W. Thomas - To supplying and delivering winter sand to City Yard.
- Topmar Housing Construction Ltd. - To construction of Centennial Building at Odell Park.
- Shiretown Construction Co. - To bulldozing services at City Land Fill.

The current expenditures for the twelve-month period January 1, 1966 to December 31, 1966 appear as follows:-

		Net	<u>Appropriation</u>	<u>Expenditure</u>	<u>Debit</u>	<u>Credit</u>
Street Lights	\$ 70,180.00	72,083.35		1,903.35		
Public Works	31,100.00	33,651.00		2,551.00		
Roads and Streets	227,975.00	225,328.01		2,646.99		
Sanitation (Land Fill and Garbage)	65,497.00	64,374.82			1,122.18	
Wilmot Park	3,640.00	4,527.50		887.50		
Odell Park	7,324.00	8,718.79		1,394.79		
Carleton Park	3,400.00	3,868.71		468.71		
Old Burial Ground	2,125.00	1,748.76			376.24	
Street Cleaning	51,200.00	48,976.50			2,223.50	
Loyalist Burial Ground	100.00	99.82				.18
Clearing Park Areas	1,000.00	1,390.01		390.01		
TOTALS =	\$ 463,541.00	464,767.27		7,595.36	6,369.09	

	<u>Revenue</u>	<u>Net Expenditure</u>	<u>Credit</u>
Water Pumping Station)		50,519.41	
Water Ordinary } \$ 282,286.85	69,779.55	136,260.77	
Sewerage Domestic }	17,596.08		
Salaries		8,131.04	
TOTALS =	<u>\$ 282,286.85</u>	<u>146,026.08</u>	<u>136,260.77</u>

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

The 1966 preliminary census shows that the City's population was 22,158.

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.

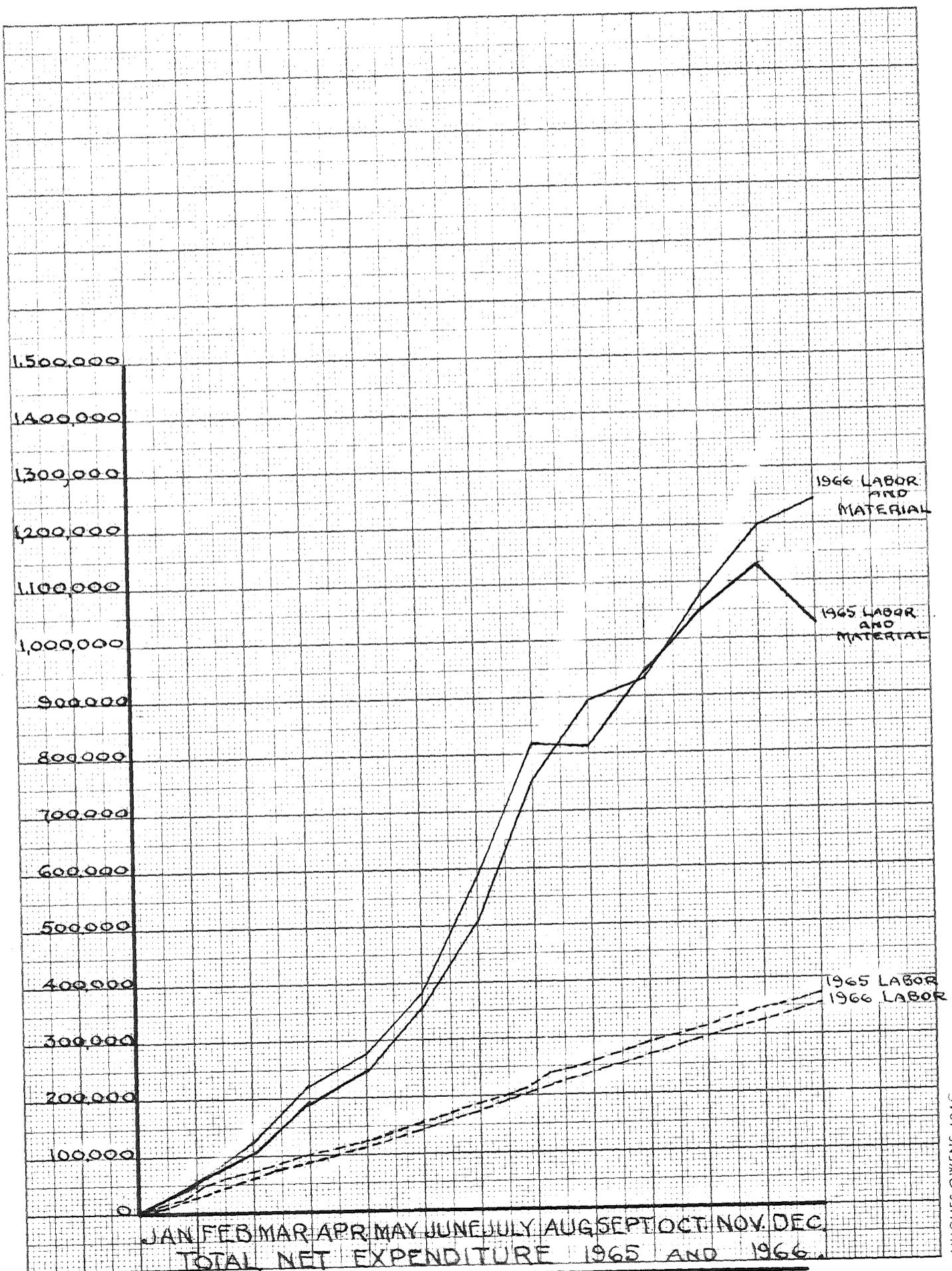
TOTAL YEARLY EXPENDITURE

The total yearly net expenditure under the direct supervision of the City Engineer in 1966 amounted to \$1,240,520.46.

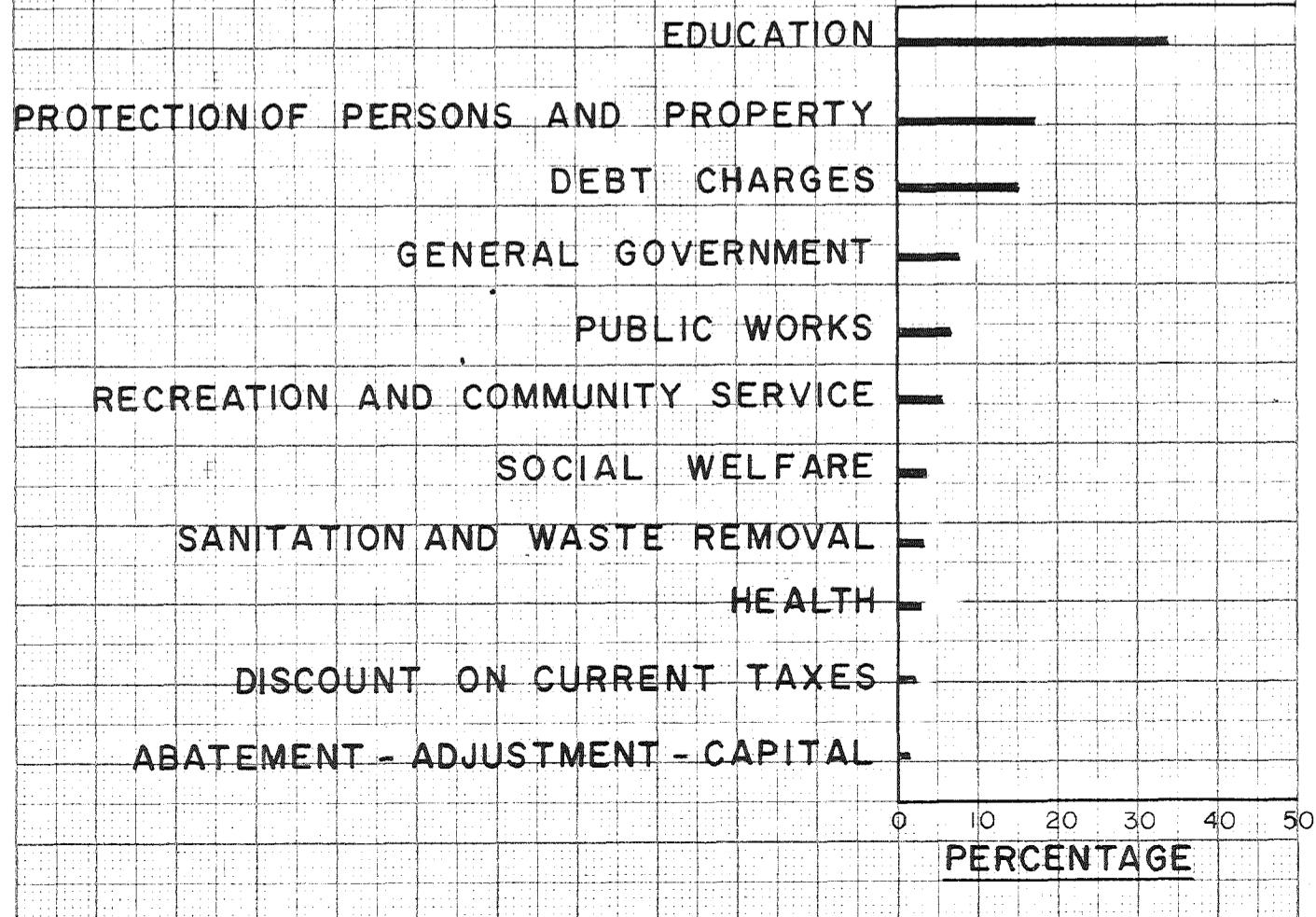
A graphic comparison of expenditures for labor, (including hired trucks and machinery) and labor and material for the year 1965 and the year 1966 is shown on the following graph.

The location of new construction completed and commenced in 1966 is shown on maps inserted after Page 4 of this report.

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



DISTRIBUTION OF THE 1966 CITY DOLLAR



ROADS AND STREETS

In 1966 the appropriation for Roads and Streets was \$227,975.00.

There are in Fredericton some 70.69 miles of Roads and Streets; 12.23 miles being located on the north side of the Saint John River and 58.46 miles on the south side. In addition there are 52.65 miles of concrete and asphalt sidewalks; 9.21 miles on the north side and 43.44 miles on the south side of the Saint John River.

Roads and Streets

	<u>Urban</u>	<u>Rural</u>	<u>Total (Miles)</u>
Paved	52.52	5.31	57.83
Gravel	4.61	6.42	11.03
Chip Seal	1.57	.26	1.83
TOTALS =	58.70	11.99	70.69

Roads and Streets Expenditure - 1966

Gross Expenditure	\$ 318,821.84
Credits	93,493.83
Net Expenditure	\$ 225,328.01
1966 Appropriation	227,975.00
CREDIT	\$ 2,646.99

The above credits amounting to \$93,493.83 are made up as follows:-

Materials or charges for machinery to Journal Voucher (Materials sold to other City Journal Voucher (Gas, Oil, Varsol, Antifreeze, Rebate for Winter Works Project N.B. 34 and N.B. 35 Flintkote Company (Return of Drums) Rebate from Compensation Board (injured workmen) Forest Hill Cemetery Co. (Digging grave) L. Budovitch (Sale of Batteries) Abe Levine & Sons Ltd. (Sale of scrap) Journal Voucher (Machinery rental on other accounts).	private parties\$ 2,797.31 Departments) 249.50 Diesel Fuel) 4,656.79 (Federal Government). 627.07 176.00 229.84 20.00 51.90 100.92 84,584.50	
	TOTAL = \$ 93,493.83	

The Gross Expenditure is divided as follows:-

Labor - The total of Roads and Streets Payrolls	\$ 103,520.66
Hired Trucks and Machinery	21,284.00
Material - Which includes Workmen's Compensation,	
Charges Unemployment Insurance and all	
materials including purchase and repairs	
to City owned equipment	<u>194,017.18</u>
TOTAL	\$ 318,821.84

The Gross Expenditure of \$318,821.84 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

Snowplowing Sidewalks:- 52.65 miles

52.65 miles of sidewalk were kept plowed in 1966.

Total expenditure under this heading amounted to \$5,493.66 and was made up as follows:-

Labor	\$ 2,698.66
City Machinery Charges	<u>2,795.00</u>
TOTAL	\$ 5,493.66

In 1966 the unit cost of plowing and sanding one mile of sidewalk was approximately \$192.00 and was calculated as follows:-

Labor	\$ 4,586.14
Hired Truck and Machinery	46.90
City Machinery charges	3,962.30
Materials	<u>1,495.00</u>
TOTAL	\$10,090.34 ----(1)

The overall cost, including Compensation, Pension Fund and Sick Leave was approximately \$207.00 per mile.

ITEM #2

Snow Control:- Blowing, shovelling and hauling snow, (Streets) 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 amounted to \$79,411.33 and was made up as follows:-

Labor	\$ 23,861.85
Hired Trucks and Machinery	18,990.25
Machinery Charges (City graders, jeeps, bulldozers, etc.)	27,048.50
Materials (Kerosene, shear bolts, snow fencing, etc.)	534.38
Expendable materials (Grader blades, chains, shear pins, etc.)	3,655.06
Maintenance of snow equipment (repairs to Snow Blowers, etc.)	<u>5,321.29</u>
TOTAL EXPENDITURE.....	<u>\$ 79,411.33</u>

The following table shows comparative labor (including hired trucks and machinery) costs of Snow Control for the years 1964 to 1966 inclusive:-

	<u>1964</u>	<u>1965</u>	<u>1966</u>
Snowplowing Roads and Streets	\$ 14,055.03	9,919.44	11,706.60
Blowing, hauling and shovelling snow	37,430.87	36,437.35	27,786.19
Catch Basins	3,842.61	2,653.84	2,628.24
Snow Fences	752.74	674.19	607.82
Plowing Parking Lots	<u>248.68</u>	<u>632.13</u>	<u>123.25</u>
TOTAL	<u>\$ 56,329.93</u>	<u>50,316.95</u>	<u>42,852.10</u>

70.24 miles of Roads and Streets were plowed and maintained during the winter months. (Total mileage 70.69 less Industrial Service Road .45 miles, equals 70.24 miles).

The unit cost per mile of plowing, salting and sanding City Roads and Streets was approximately \$1,466.00 and was calculated as follows:-

Labor (Plowing and Sanding)	\$ 31,411.77
Hired Trucks and Machinery	19,177.85
Machinery Charges (City Graders, Jeeps, Bulldozers, Sander, etc.)	31,717.70
Materials (Sand, Salt)	11,719.77
Repairs to Snow Blowers and Boilers	5,321.29
Expendable Materials (Grader Blades, Picks, Shovels, etc.)	<u>3,655.06</u>
TOTAL	<u>\$ 103,003.44</u>

--(2)

The overall cost including Compensation, Pension Fund, Holiday and Sick Leave was approximately \$1,547.00 per mile.

TOTAL COST OF SNOW CONTROL: -- Add (1) and (2) \$ 113,093.78

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

January 1, 1962 to December 31, 1962	90.80 inches
January 1, 1963 to December 31, 1963	106.10 inches
January 1, 1964 to December 31, 1964	120.40 inches
January 1, 1965 to December 31, 1965	85.50 inches
January 1, 1966 to December 31, 1966	63.80 inches

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 snow fencing was purchased in 1966.

ITEM #3

Sanding Streets and Walks:-

Storing sand in Winter Storage pile and spreading same on slippery streets and walks.

Labor	\$ 9,437.40
Hired trucks and machinery	234.50
City machinery charges	5,836.50
Materials	<u>13,214.77</u>
TOTAL EXPENDITURE ...\$ 28,723.17	

6,461 cubic yards of sand was purchased during the winter of 1966. The sand was supplied by W. R. and W. W. Thomas at a price of \$1.15 per cubic yard delivered to the City Yard stock pile.

In 1966, 300 tons of salt was used for ice control. The cost and distribution charges are included under the above heading. In stock December 31, 1966 was 800 Bags (40 Ton) of salt.

ITEM #4

Streets:-

General work of maintenance of streets and sidewalks 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 \$69,933.52 and was made up as follows:-

	Labor, Hired Trucks & Machinery	City Machinery Charges	Materials	Total
Repairing Machinery	\$ 13,655.94	1,710.00	23,242.56	38,608.50
Maintaining Driveways	579.45	372.50	191.34	1,143.29
Dust Control	803.11	95.00	2,670.15	3,568.26
Erection of Guard Posts	309.17	28.00	141.29	478.46
Repairing Streets (Curbs and Walks)	3,533.15	1,205.50	2,837.71	7,576.36
Sodding and Seeding	69.30	44.00	-----	113.30
Rip-Rapping	596.38	162.00	31.05	789.43
Cutting Grass	1,501.70	465.50	170.25	2,137.45
*Weather Account	15,518.47	-----	-----	15,518.47
TOTALS =	\$ 36,566.67	4,082.50	29,284.35	69,933.52

* Less Compensation cheques received in 1966 (\$229.84).

In 1966, 22,827 gallons of oil was used for dust control.

ITEM #5

Surface Sewers:-

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 \$9,943.99 made up as follows:-

Labor	\$ 6,861.97
Hired Trucks and Machinery	261.50
City Machinery Charges	2,011.50
Materials	809.02
TOTAL	\$ 9,943.99

There are in Fredericton 46.87 miles of Surface Sewer, consisting of 6.30 miles on the north side of the Saint John River and 40.57 miles on the south side of the Saint John River.

ITEM #6

Yard:-

Caretaker at City Yard, repair work in
City Yard, Heat, Power, etc.

Labor	\$ 4,196.30
Hired Trucks and Machinery	19.50
City Machinery Charges	156.00
Light, Power and Telephone	800.58
Materials (Tools, etc.)	<u>3,992.34</u>
TOTAL	<u>\$ 9,164.72</u>

ITEM #7

Grading and Gravelling:-

Grading and application of gravel on City
Roads and Streets.

Labor	\$ 429.18
Hired Trucks and Machinery	8.00
City Machinery Charges	910.00
Materials (Gravel, crushed rock)	<u>4,049.23</u>
TOTAL	<u>\$ 5,396.41</u>

1366.45 tons of crushed gravel was used in the
maintenance and repairs to Gravel Roads under Roads
and Streets.

The Gravel was purchased from Forbes and Sloat
Ltd. at a contract price of \$1.90 per ton for Class "A"
($1\frac{1}{4}$ " Crushed) gravel delivered to the job.

In addition 614.60 tons of $1\frac{1}{4}$ " Crushed Rock was
obtained from Diamond Construction (1961) Ltd. at a
cost of \$2.50 per ton.

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

ITEM #8

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	\$ 1,240.01
Hired Trucks & Machinery	10.50
City Machinery Charges	<u>248.00</u>
TOTAL =	<u>\$ 1,498.51</u>

The above expenditure was for the cutting and clearing all underbrush along the bank of the Saint John River from the lower entrance of the Experimental Farm to the Princess Margaret Bridge.

ITEM #9

Wilsey Road:-

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

Labor	\$ 709.41
City Machinery Charges	97.00
Materials (Gravel, pipe, cement) ..	<u>28.72</u>
TOTAL =	\$ 835.13

On a section of the Wilsey Road, from the intersection of the Wilsey and Doak Roads to the Vanier Highway, the Right of Way was skirted and culverts installed where necessary.

ITEM #10

Doak Road:-

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

The expenditure incurred on this Road was for clearing Right of Way, installing culverts where necessary and graveling a section of the Road, and is made up as follows:-

Labor	\$ 1,047.26
Hired Trucks and Machinery	203.50
City Machinery Charges	1,291.00
Materials (Gravel, pipe, cement) ..	<u>6,106.72</u>
TOTAL =	\$ 8,648.48

ITEM #11

New Maryland Road:-

No expenditure was made on this Road in 1966 under this heading, but a credit of \$265.48 was received from Government of Canada Project N.B.-34 for Winter Work carried out in December, 1965.

ITEM #12

Rural Roads:-

The above heading includes the following Roads:-

- (1) Portion of Forest Hill Road from residence #812 Forest Hill to the end of Road.
- (2) Priestman Street
- (3) Tower Road
- (4) Portion of Flanagan Road

All work done on these Roads, other than work done by Motor Graders.

The expenditure on these Roads amounted to \$253.14 and is made up as follows:-

Labor	\$ 98.40
Hired Trucks and Machinery	67.00
City Machinery Charges	61.50
Materials (Concrete Pipe)	<u>26.24</u>
TOTAL	<u>\$ 253.14</u>

ITEM #13

Asphaltic Concrete Repairs and Paving Driveway Entrances:-

Patching and repairing asphalt pavement, applying seal coat, light tar or asphalt to pavements and applying asphalt to driveways, (labor cost) - \$12,745.24.

Total Cost:-

Labor	\$ 12,745.24
Hired Trucks and Machinery ..	105.50
City Machinery Charges	7,297.50
Materials	<u>12,075.18</u>
TOTAL	<u>\$ 32,223.42</u>

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 Diamond Construction Company (1961) Limited and W. J. Gorman.

The total expenditure for Pavement Repairs and Driveways for 1966, under the above heading, including Workmen's Compensation, Pension Fund, Holidays, Sick Leave and Depreciation on the Plant, amounted to \$36,257.09 and was computed as follows:-

ASPHALT

Stock from 1965:-

1530 Gallons RC ₃	\$ 612.00
90 Gallons RS ₂	<u>45.90</u>
	\$ 657.90

PLUS Stock purchased in 1966

11250 Gallons RC ₃	\$ 4,534.62
2700 Gallons RS ₂	1,366.64
2052 Gallons RS ₁	<u>738.72</u>
	<u>6,639.98</u>
Total Stock	\$ 7,197.88

LESS Stock for use in 1967

1350 Gallons RC ₃	\$ 540.00
1080 Gallons RS ₂	<u>540.00</u>
	\$ 6,117.88

<u>PLUS Freight and Cartage</u>	<u>24.00</u>
TOTAL GROSS	\$ 6,141.88
<u>LESS - Credit on return of Drums</u>	<u>1,902.00</u>
NET COST OF LIQUID ASPHALT USED	\$ 4,239.88

Cost of Hot Mix Asphalt in patching streets and driveways, obtained from Diamond Construction Company (1961) Limited and W. J. Gorman -
\$ 4,875.50.

Total Hot Mix Asphalt Cost	\$ 4,875.50
Liquid Asphalt	4,239.88
Kerosene (2166 Gallons)	679.43
Crushed Rock (313.65 tons)	862.53
Crusher Dust (676.25 tons)	1,352.50
Sand (42 cubic yards)	37.80
Depreciation on Conveyor and Hopper and Dryer	652.69
Maritime Electric Company	539.76
Repairs to Plant	933.38
Propane Gas	18.75
City Labor (City employees, including Pension Fund, Workmen's Compensation and Holiday Account) ..	15,039.38
Hired Truck and Machinery	105.50
City Machinery	7,297.50
Miscellaneous (Pick axes, shovels, etc.) ..	<u>197.05</u>
TOTAL GROSS EXPENDITURE	\$ 36,831.65

LESS CREDITS

Town of Marysville (Sale of Rock Dust) ..	\$ 27.00
N.B. Telephone Co. (Repairs to Cross Trenches)	155.95

Research Station (Patching Driveway) ...	\$ 144.19
C. Cedric Cooper (Sale 5 Gals. Colas)...	1.75
Eastwood Industries (Patching Dominion Store)	225.04
Journal Voucher (Dust)	<u>20.63</u>
	<u>574.56</u>
TOTAL NET COST	<u><u>\$ 36,257.09</u></u>

Materials in Stock December 31, 1966:-

1350 Gallons RC ₃ @ 40¢ per Gallon	\$ 540.00
1080 Gallons RS ₂ @ 50¢ per Gallon	540.00
107.3 tons of 0 - ½" Chips @ \$3.25 per ton.	348.72
110.0 tons of 0 - 1¼" Dust @ \$2.25 per ton.	<u>247.50</u>
TOTAL	<u><u>\$ 1,676.22</u></u>

ITEM #14

City Road Graders:-

Operator's Wages	\$ 1,132.76
Machinery Charges	<u>4,050.50</u>
Total for Labor & Machinery Charges.	<u><u>\$ 5,183.26</u></u>

The repair costs for City Graders will be found on Page 2 of this report under the heading "Roads and Streets".

ITEM #15

Parking Lots:-

Under this heading one Parking Area was extended, located on Queen Street, west of the Canadian Legion Building and extending from Queen Street to the St. John River.

The expenditure for the extended Parking Area was as follows:-

Labor	\$ 716.71
Hired Machinery	550.00
City Machinery	<u>1,606.00</u>
TOTAL	<u><u>\$ 2,872.71</u></u>

ITEM #16

Paint Department:-

Painting, repairing and installing street signs
on City Streets.

The total expenditure under this heading amounted
to \$2,625.49, made up as follows:-

Labor	\$ 1,245.29
City Machinery	17.50
Materials	<u>1,362.70</u>
TOTAL	\$ 2,625.49

ITEM #17

Clearing along Rights-of-Way:-

Expenditure\$ 63.94

In December of 1966, the right-of-way of
Forest Hill Road from Residence #800 Forest Hill
to the Vanier Highway was skirted for the
above expenditure.

ITEM #18

Chip Seal and Seal Coating:-

In 1966, Diamond Construction (1961) Ltd.
was awarded a contract to chip seal and seal
coat a number of City Streets. In addition
Class "A" Gravel was supplied by Forbes and
Sloat. The cost of these contracts amounted to
\$53,055.66 and were made up as follows:-

Diamond Construction (1961) Limited:

39,442 gals. emulsion @ .40/Gal...\$ 15,776.80
439.30 tons 3/8" Chips @ \$7.00/ton 3,075.10
443.65 tons 1/2" Chips @ \$6.50/ton.. 2,883.73
1035.25 tons 3/4" Chips @ \$6.00/ton. 6,211.50
1933.45 tons Surface Seal @ \$11.75/ton 22,718.04 \$ 50,665.17

Forbes and Sloat Limited:

1258.15 tons Class "A" Gravel @ \$1.90/ton 2,390.49
TOTAL \$ 53,055.66

The Street preparatory work, other than the
laying in place of the premixed material and chips was
done by regular city crews at an expenditure of
\$2,002.52 and is made up as follows:-

City Labor	\$ 1,055.52
Hired Trucks & Machinery	18.00
City Machinery	<u>929.00</u>
TOTAL	<u>\$ 2,002.52</u>

The total expenditure under this heading amounted to \$55,058.18 and was made up as follows:-

City Labor	\$ 1,055.52
Hired Trucks and Machinery	18.00
City Machinery	929.00
Diamond Construction (1961) Ltd. and Forbes and Sloat Ltd.	<u>53,055.66</u>
Gross Expenditure	<u>\$ 55,058.18</u>

The following Streets were Seal Coated with $\frac{1}{4}$ " Hot Mix:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
King - St. John Street to Queen Street		850
Queen - Canadian National Railway underpass to Church Street		950
Church - Brunswick Street to Charlotte Street		750
St. John - Brunswick Street to Churchill Row		1,150
Charlotte - Smythe Street to University Avenue		5,250
Westmorland - Brunswick Street to Saunders Street		1,050
Northumberland - Brunswick Street to Saunders Street..		1,050
Alexandra - University Avenue to Waterloo Row		1,300
Gibson - Union Street to C. P. R. Crossing		1,050
Hillcrest Drive - Clark Street to westerly limits		<u>970</u>
TOTAL		<u>14,370</u>

14,370 lineal feet = 2.72 miles

The following streets were Chip Sealed with $\frac{3}{4}$ ", $\frac{1}{2}$ " and $\frac{3}{8}$ " Chips:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Smythe - Willingdon Street to Prospect Street		1,930
Prospect - Smythe Street west		617
Wilsey Road - Lincoln Road to Doak Road		5,765
Doak Road - Wilsey Road to Vanier Highway		<u>1,375</u>
TOTAL		<u>9,687</u>

9,687 lineal feet = 1.83 miles

In addition, the road leading from Waggoner's Lane to Odell Park was chip sealed as well as a parking area at Odell Park.

The total mileage for Seal Coating and Chip Sealing under the above heading is 4.55.

Other Expenditures:-

In addition to the above expenditure included under "Roads and Streets," there is an expenditure of \$15,987.52 which does not show in any of the above accounts and is made up as follows:-

Workmen's Compensation	\$ 6,875.00
Mobile Radios (Telephone Company)	667.88
Telephone Company (Phones)	112.11
Unemployment Insurance Commission	1,567.70
Receiver General (Canada Pension)	4,584.10
Province of N. B. (Registration of Vehicles and Lenses)	107.00
Minister of Finance (Audit)	61.67
Car Allowance	120.00
H. S. Gill and Sons Ltd.	145.92
Wilson Printing	57.16
J. S. Neill and Sons Ltd.	101.47
Federal Hardware	465.31
Chippin's Clothing	216.09
Miscellaneous	322.25
Journal Voucher (Portion of L. P. McNeill's Salary)...	<u>1,000.00</u>
TOTAL	\$ 16,403.66

LESS CREDITS:-

L. Budovitch (Sale of Batteries) ...\$	51.90
Credit re damage of Refuse Can	15.00
Workmen's Compensation Board (cheque re Albert Hovey)	229.84
Abe Levine (Sale of Scrap Iron)	100.92
Canadian National Railway (Grading Freight Yard)	<u>18.48</u>
	<u>416.14</u>
NET EXPENDITURE	\$ 15,987.52

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

ITEM	1963	1964	1965	1966
1. Snowplowing sidewalks	\$ 4,932.42	3,630.44	2,507.92	2,698.66
2. Snow Control	79,099.01	56,329.93	50,316.95	42,852.10
3. Sanding Streets	11,271.58	14,208.56	13,704.55	9,671.90
4. Streets Account	34,467.89	39,880.00	34,854.56	36,796.51
5. Surface Sewer	6,309.93	5,748.64	5,303.24	7,123.47
6. Yard	3,912.51	3,653.21	4,270.00	4,215.80
7. Grading and Gravelling	77.20	-----	1,336.70	437.18
8. Lincoln Road	-----	159.40	-----	1,250.51
9. Wilsey Road	444.36	1,380.57	130.40	709.41
10. Doak Road	668.90	201.75	2,048.55	1,250. 51 ⁷⁶
11. Maryland Road	-----	-----	660.62	-----
12. Rural Roads	-----	-----	-----	165.40
13. Tarvia Repairs	11,998.06	8,418.73	14,457.25	12,850.74
14. Road Graders	934.19	933.98	1,002.73	1,132.76
15. Parking Lots	30.33	96.41	-----	1,266.71
16. Paint Department	1,256.64	1,050.17	983.25	1,245.29
17. Clearing along Rights-of-Way	-----	805.46	789.62	63.94
18. (Chip Seal (Surface Seal	-----	-----	1,415.16	745.74 327.78
TOTALS =	\$155,403.02	136,497.25	133,781.50	124,804.66

The following items of machinery were purchased this year and charged to Roads and Streets:-

1 - Galion Road Grader Model 118
Serial No. C118G01035, Motor
No. 199701, Equipped with
Craig #63 Wing, Serial No.
66043 \$ 29,500.00
Less trade in on Allis
Chalmers Road Grader Model
AD/40, S/N, 1437 Motor No.
GM471-4A51080 - Equipped with
wing 10,100.00
\$ 19,400.00
3% S.S. and E. Tax 582.00
\$ 19,982.00
Municipal License 2.00 \$ 19,984.00

1 - 1966 Ford 2 Door Custom,
Serial No. 6B53C - 226072 \$ 3,087.00
Less trade in allowance on
1963 Ford Tudor 1,542.00
\$ 1,545.00
3% S.S. and E. Tax 46.35 \$ 1,591.35

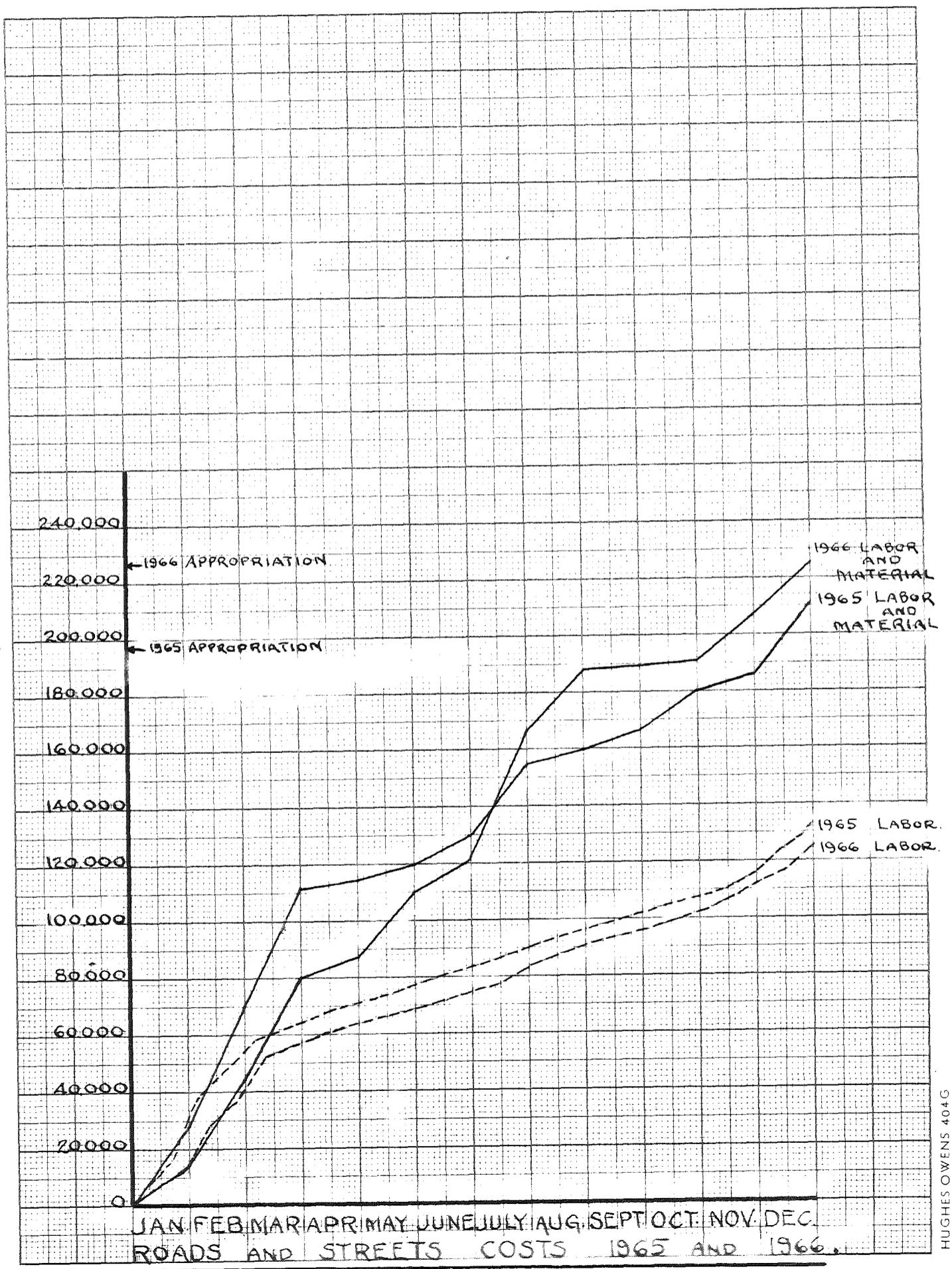
1 - CJ5, 1966 Kaiser Jeep, Half Cab, Oil Filter, O.B. Air Cleaner, Windshield Wipers, Driver's Seat and Passenger (Bucket). Half Steel Cab, changing over Snow Plow Serial 8305-203554	
Motor 4J-420692	\$ 3,135.40
<u>Less</u> - Trade in 1961 Jeep, Serial 575-480126534	850.40
	\$ 2,285.00
3% S.S. and E. Tax	<u>68.55</u>
	\$ 2,353.55
1 - 1966 Chevrolet Model C1504 - ½ ton, Serial No. 6C1504623529A, Motor No. 6-281781, Dash Heater and Defroster, Right Mirror, 5-775 x 15, 4-Ply Nylon Tires, Undercoat, Plus Freight	\$ 2,612.45
Discount	<u>412.45</u>
	\$ 2,200.00
<u>Less</u> - Trade in allowance on International ½ ton 1964	<u>760.00</u>
	\$ 1,440.00
3% S.S. and E. Tax	<u>43.20</u>
	\$ 1,483.20
1 - R.H. - 658-4L Atlas-Copco Rock Drill	\$ 730.00
<u>Less</u> Trade in allowance on R.H. - 571 Rock Drill S/N 642207	<u>73.00</u>
	\$ 657.00
3% S.S. and E. Tax	<u>19.71</u>
	\$ 676.71
TOTAL	<u><u>\$ 26,088.81</u></u>

The following is a list of vehicles and machinery used in the Roads and Streets Department, together with the repair costs for 1965 and 1966, including tires and tubes.

<u>Name of Vehicle</u>	<u>Year Purchased</u>	<u>Repairs 1965</u>	<u>Repairs 1966</u>
Austin Western Grader (300 Pacer)	1962	\$ 1,164.15	\$ 1,615.12
Allis Chalmers Grader (Traded in 1966)	1955	3,232.07	488.78
Galion Grader	1961	2,265.33	1,892.82
Galion Grader Model 118	1966	-----	62.03
Caterpillar D-6 Bulldozer	1953	8,254.05	2,538.62
Case 420 Crawler Tractor	1961	1,393.37	1,550.29
Case 420 Crawler Tractor	1962	1,229.92	1,973.51
T.D.5 International Crawler Tractor	1963	2,235.13	1,535.02
Case 750 D. Bulldozer	1965	310.82	798.74
Hy Hoe 3/8 yard Backhoe	1964	1,896.46	1,363.85
Unit 3/4 yard Backhoe	1957	4,191.40	4,005.39
Pettibone Mulliken Loader	1958	7,246.10	1,780.22
Hough 50 Model Loader	1963	1,621.21	620.23
Airpic Compressor	1953	120.54	230.63
Ingersol Rand Compressor	1957	86.30	56.87
Copco Compressor	1964	29.70	22.15
Tarvia Roller Model #157	1955	940.49	502.98
Willys Jeep #11 (Traded in 1966)	1961	567.37	100.81
Willys Jeep #11	1966	-----	17.90
Willys Jeep #12	1962	434.98	409.85
Willys Jeep #17 (Traded in 1965)	1960	112.64	-----
Willys Jeep #17	1965	143.27	114.30
Willys Jeep #40	1962	282.53	209.36
Dodge 3 Ton	1963	237.65	572.09
G.M.C. 3 Ton	1962	622.33	204.12
International 3 Ton	1961	425.52	770.01
Chevrolet 3 Ton	1960	291.81	236.81
Ford 3 Ton (Traded in 1965)	1959	64.59	-----
Chevrolet 3 Ton	1965	497.15	135.30
International 1/2 Ton (Traded in 1966)	1964	904.38	75.48
Chevrolet 1/2 Ton	1966	-----	42.66
International 1 Ton	1959	201.21	306.50
Chevrolet Panel	1963	168.02	210.65
Chevrolet 1/2 Ton	1965	69.15	79.53
Ford Tudor 300 (Traded in 1966)	1963	446.07	13.20
Ford	1966	-----	90.84
Expendable Accessories (Grader Blades, Bolts, Nuts, Bulldozer Blades and Corners, Tools, etc.)		6,624.66	5,641.73
TOTAL COST	\$ 48,310.37	\$ 30,268.39	

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

Name of Vehicle	Year Purchased	Repairs 1965	Repairs 1966
Sicard Snow Blower #30	1949	\$ 1,534.55	\$ 4,384.27
Sicard Snow Blower #39 (1952 Model)	1961	915.46	728.62
Sicard Snow Blower #47	1963	719.49	122.87
Ford Sand Spreader	1960	890.08	741.38
TOTAL COST		\$ 4,059.58	\$ 5,977.14



WINTER WORKS PROGRAM

The Public Works Department in 1966 took advantage of assistance offered under the Winter Works Incentive Program on all projects which qualified for same.

Assistance was obtained on several projects which were part of the Capital Works Program for the year and which were commenced or were in progress during the period for which assistance is available; namely, November 1st to April 30th.

The following is a list of projects on which assistance was obtained and the credits for the same appear in the appropriate accounts or will be credited in 1967 when claims are finalized.

NOVEMBER 1, 1965 - APRIL 30, 1966

<u>Number</u>	<u>Description</u>	<u>Total Direct Payroll Cost</u>	<u>Allowable Amount Claimed</u>	<u>Net Labor Machinery Cost to City of Fredericton</u>
N.B.-33	Park area improvement, \$ Montgomery-Campbell Park	827.84	\$ 300.73	\$ 601.46
N.B.-34	Clearing Right-of-Way, Maryland Road	682.13	265.48	530.96
N.B.-35	Clearing Right-of-Way, Doak Road	902.18	361.59	723.19
N.B.-37	Stumping, grubbing and disposing of stumps on Stanley and Willingdon Streets	2,122.78	993.84	1,987.68
N.B.-38	Odell Park - clearing and grubbing 6 acres Recreational Area	5,853.89	2,329.08	4,658.16
N.B.-56	Clearing Right-of-Way Wright Street	1,063.17	456.55	913.11
N.B.-57	Clearing Parkside Drive	1,477.51	594.27	1,188.55
N.B.-68	Clearing Service Road, Industrial Park	1,421.01	578.65	1,157.31
N.B.-88	Clearing Right-of-Way, Waggoner's Lane	428.09	147.57	295.14
TOTALS FOR PERIOD NOV. 1/65 to APRIL 30/66		<u>\$ 14,778.60</u>	<u>\$ 6,027.76</u>	<u>\$ 12,055.56</u>

CAPITAL ACCOUNT CURB AND GUTTER

The net expenditure under this heading amounted to \$54,344.83.

For the above expenditure of \$54,344.83, concrete curb and gutter was constructed at the following locations:-

<u>Location</u>	<u>Lineal Feet</u>
Oxford Street, York Street to Simcoe Court (both sides)....	927
Simcoe Court, (both sides)	2,192
Lorne Street, Montgomery Street to Bessborough Street (both sides)	685
Bessborough Street, Lorne Street to Massey Street (both sides)	2,385
Massey Street, Bessborough Street to Smythe Street (both sides)	687
Gregg Court, portion on north side	40
Mansfield Street, portion on south side	177
Rochester Street, Canterbury Drive to Leeds Drive (both sides)	1,737
Leeds Drive, Southampton Drive to Rochester Street (both sides)	3,220
Liverpool Street, Southampton Drive to Canterbury Drive (both sides)	1,727
Folkestone Court (both sides)	620
Southampton Drive, Liverpool Street to Leeds Drive	561
Hillcrest Drive, Clark Street to Forbes Street (north side)	468
Irvine Street, from west of Noble Street towards Gibson Street (both sides). .	1,355
Bailey Drive, Perley Court to Kennedy Court (both sides)...	545
Kennedy Court (both sides)	549
Squires Street, end of existing curb to Regent Street (both sides)	986
College Hill Road, Montgomery Street towards Priestman Street (both sides)	2,022
Regent Street, Montgomery Street to Priestman Street (east side)	1,688
Beechwood Crescent, portion on south side	20
TOTAL	22,591

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 Limited at a price of \$14.85 per cubic yard. A cubic yard of concrete poured 20.6 lineal feet of Curb and Gutter.

The unit cost of one lineal foot of Curb and Gutter, found by dividing the total length laid, which equals 22,591 lineal feet, into the total cost of \$54,344.83 is \$2.41 per lineal foot.

The topsoiling of Boulevards is included in the above cost .

CAPITAL ACCOUNT PAVING

As previously stated in this report, the Diamond Construction (1961) Limited was awarded a contract in 1966 to lay pavement on a number of City streets. In addition Class "A" Gravel, obtained from Forbes and Sloat Ltd., was applied to some of these streets. The cost of the above materials amounted to \$205,299.02 and was made up as follows:-

Diamond Construction (1961) Limited

3/8" Chips - 125.55 tons @ \$7.00 per ton ...\$	878.85
1/2" Chips - 41.90 tons @ \$6.50 per ton	272.35
3/4" Chips - 449.50 tons @ \$6.00 per ton ...	2,697.00
RS ₂ Liquid Asphalt - 7500 Gallons @	
30¢ per gallon	2,250.00
Surface Seal 1/4" Mix, 2278.45 tons @	
\$11.75 per ton	26,771.79
Supply and Apply 36,572 Gallons of Prime	
@ 28¢ per Gallon	10,240.16
Supply and Apply RS ₁ - 5,000 Gallons	
@ 50¢ per gallon	2,500.00
1 1/4" Crushed Rock, 143.6 tons @ \$2.50 per ton	359.00
Asphalt Base, 3/4" Mix, 17,100.20 tons	
@ \$7.35 per ton	125,686.47
Asphalt Base, 1/2" Mix, 2,186.90 tons	
@ \$9.75 per ton	21,322.28
Asphalt Base, 51.35 tons @ \$6.00 per ton ...	308.10
Asphalt Seal, 6.6 tons @ \$10.00 per ton ...	<u>66.00</u>
	193,352.00

Forbes and Sloat Ltd.

633 tons Class "A" Gravel @ \$1.90 per ton	<u>11,947.02</u>
TOTAL	\$205,299.02

The Street preparatory work, other than laying in place of the premixed material and chips was done by regular city crews at an expenditure of \$20,717.08, made up as follows:-

City Labor	\$ 9,532.58
Hired Trucks and Machinery.	2,314.50
City Machinery	<u>8,870.00</u>
TOTAL	\$20,717.08

The total expenditure under this heading amounted to \$230,003.92 and was made up as follows:-

City Labor	\$ 9,532.58
Hired Trucks and Machinery	2,314.50
City Machinery	8,870.00
Diamond Construction (1961)	
Ltd. and Forbes & Sloat	205,299.02
Materials (Gas, Brick,	
Cement, Sand, Flares,	
etc.)	<u>3,987.82</u>
GROSS EXPENDITURE	\$230,003.92

The above expenditure of \$230,003.92 was made up as follows:-

1. New Pavement
2. Recapping City Streets
3. Surface Seal to City Streets
4. Chip Sealing shoulders of Lincoln Road

1. New Pavement

The following streets were paved with 3/4" Hot Mix by the Diamond Construction (1961) Limited:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
Beechwood Crescent		1,431
York Street	Montgomery St. to Mansfield St.	592
Pederson Crescent		570
Mansfield Street		650
Lorne Street	Montgomery St. to Bessborough St.	360
Bessborough Street	Lorne Street to Massey Street	1,140
Massey Street	Bessborough Street to Smythe St.	385
Oxford Street	York Street west	430
Simcoe Court		915
King's College Road	York Street west to existing pavement	972
Pembroke Crescent		1,026
Colter Court		260
Canterbury Drive	Cambridge Crescent to near Liverpool Street	1,550
Essex Street		210
Cambridge Crescent	Leicester St. to Canterbury Drive	1,360
Coventry Crescent		1,515
Manchester Court		520
Liverpool Street	Canterbury Drive to Southampton Dr.	840
Folkestone Court		316
Southampton Drive	Liverpool Street to Leeds Drive	310
Rochester Street	Canterbury Drive to Leeds Drive	860
Leeds Drive		1,640
Noble Street	McEvoy Street to Irvine Street	1,840
Bailey Drive	Noble Street to Kennedy Court	673
Kennedy Court		220
Perley Court		243
Irvine Street	Noble Street 500' East and 100' West	600
Devon Avenue	End of existing pavement to Gill St.	350
Hillcrest Drive	Clark Street to Forbes Street	335
Gregg Court		435
Jones Street	Fenety Street to Valley View Street	620
Squires Street	End of existing pavement to Regent St.	458
College Hill Road	Montgomery St. to Priestman Street	<u>1,717</u>
	TOTAL	<u>25,343</u>

25,343 lineal feet = 4.80 miles

In addition, the following were paved under this heading:-

1. Driveway to J. T. Clark Memorial Library Building
2. Entrance to Provincial Government Garage,
College Hill Road
3. Driveway to Fire Station, College Hill Road
4. Strip approximately 5' wide on Regent Street
from Montgomery Street to Priestman
Street, a distance of 1,650' (east
side of Regent Street)
5. City Parking Lot, Queen Street, west of
Canadian Legion Building
6. City Parking Lot, Campbell Street, west of the
rear of the Post Office

The above listed streets were laid to a thickness of 3". The street grading and preparatory work was done by regular City crews. The premixed material was supplied by the Diamond Construction (1961) Ltd. from its plant situated at Kingsclear on Route #2, Woodstock Road. The Company charged the City of Fredericton \$7.35 per ton for the pavement in place. The total tonnage used for the above construction amounted to 17,100.20.

2. Recapping City Streets

Under this heading the Lincoln Road was recapped from the Princess Margaret Bridge to the Canadian National Railway Crossing with $\frac{1}{2}$ " hot mix, a distance of 1.37 miles. The Company charged the City of Fredericton \$9.75 per ton in place. The total tonnage used amounted to 2,186.90.

3. Surface Seal to City Streets

The following streets were surface sealed with $\frac{1}{4}$ " hot mix:-

<u>Street</u>	<u>Location</u>	<u>Lineal Feet</u>
York - C.N.R. Crossing to Connaught Street		1,250
York - Albert Street to Montgomery Street		2,500
Edinburgh - Smythe Street to York Street		2,000
Smythe - Dundonald Street to Montgomery Street		3,300
Tamarack Terrace		420
Shamrock Terrace		640
Hawthorne Terrace		420
Rookwood Avenue - Woodstock Road to C.N.R. Crossing		2,180
Saunders - Odell Avenue to Rookwood Avenue		1,000
Woodfield Court		975
Inglewood Drive - Rookwood Avenue to Hanwell Road		1,800
Beaverbrook and Dundonald - York Street to Regent St.		1,330
Smith - Union Street towards St. John River		400
McKeen - Union Street towards St. John River		335
Jaffrey - Union Street towards St. John River		300
TOTAL		18,850

18,850 lineal feet = 3.57 miles

The Company charged the City of Fredericton \$11.75 per ton in place. Total tonnage used for the above construction amounted to 2,278.45.

4. Chip Seal

Under this heading the shoulders on both sides of the Lincoln Road were chip sealed with $\frac{1}{2}$ " - $\frac{3}{4}$ " and $\frac{3}{8}$ " Chips from the lower entrance of the Experimental Station to the City limits, a distance of some 9,250 feet.

Materials used for this construction amounted to \$6,098.20 and was made up as follows:-

3/8" Chips	125.55 tons @ \$7.00 per ton	\$ 878.85
1/2" Chips	41.90 tons @ \$6.50 per ton	272.35
3/4" Chips	449.50 tons @ \$6.00 per ton	2,697.00
RS2 Liquid Asphalt - 7,500 Gallons @ 30¢ per gallon..	<u>2,250.00</u>	
TOTAL		\$ 6,098.20

Total tonnage used for above - 616.95

Total Mileage under the above heading "Capital Account Paving" was 9.74.

CAPITAL ACCOUNT DOMESTIC SEWER

Gross Expenditure and Stocked Material	\$ 68,010.92
Less Inventory, Dec. 31, 1966 ..	<u>2,023.11</u>
	\$ 65,987.81
Credits	<u>20,971.85</u>
Net Expenditure	\$ 45,015.96

Included in the net expenditure of \$45,015.96 is the amount of \$5,177.27 holdback from jobs completed in 1965 and showing in 1966 accounts.

The above credits are made up as follows:-

Chippin's Ltd.)	Local	\$ 2,176.34
Hill Bros.)	Improvement	8,292.52
Fredericton Housing Ltd.)	Charges	5,060.99
Don Grant)		10.00
F'ton Housing Ltd. (Dover Crescent))		3,104.19
Work done and materials sold to Private Parties			1,048.21
Journal Voucher (Materials paid for by Capital Account			
Domestic Sewer and charged to other City Departments)	<u>1,279.60</u>	
	TOTAL	=	\$ 20,971.85

Domestic Sewer Mains were constructed at the following locations:-

Location	Lineal Feet	
	8" Transite	8" Cast Iron
Fredericton Housing Ltd., (Skyline Acres), April - June, 1966	1,335	
Fredericton Housing Ltd., (Skyline Acres), October - November, 1966	749	
Hill Bros. (Stanley Street and Wellington Street, from Stanley Street to Smythe Street)	1,408	
Chippin's Ltd., (completion of Gregg Court and Grandame Street)	367	
Hanwell Road, Parkhurst Drive to City Limits and Cameron Court	4,755	230
Waggoner's Lane (extension)	216	
TOTAL	8,830	230

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

Location	Payment to Contractors Including Reserves for Holdbacks	City Labor and Machinery	Materials	Total
Fredericton Housing Ltd. (Skyline Acres)- Phase 1 April - June, 1966		\$ 1,954.55	\$ 3,106.44	\$ 5,060.99
Fredericton Housing Ltd. (Skyline Acres) Phase 2 October-November, 1966		1,334.14	1,770.05	3,104.19
Hill Bros. (Stanley St. and Wellington Street, from Stanley Street to Smythe Street)	5,455.50	119.40	2,717.62	8,292.52
Chippin's Ltd. (completion of Gregg Court and Grandame Street)	1,199.55	95.85	880.94	2,176.34
Hanwell Road, Parkhurst Drive to City Limits and Cameron Court	17,922.75	2,547.05	17,130.75	37,600.55
Waggoner's Lane (Extension)		520.95	414.62	935.57
TOTALS	\$24,577.80	\$ 6,571.94	\$26,020.42	\$57,170.16

All above costs include any holdback payments, thus showing the actual cost of construction greater than the net expenditure. To arrive at the cost per lineal foot of construction, the cost of \$57,170.16 must be used for determining same.

City Machinery and City Workmen installed
the Domestic Sewer at Skyline Acres and Waggoner's Lane.

Total lineal feet laid 9,060

Average cost per foot \$ 6.31

Cost by Contractors per Lineal Foot

Location	Size of Pipe 8"
Hill Bros. (Stanley Street and Wellington Street from Stanley Street to Smythe Street	\$ 5.89
Chippin's Ltd. (completion of Gregg Court and Grandame Street)	5.93
Hanwell Road, Parkhurst Drive to City Limits and Cameron Court	7.54

Cost by City Crews and Machinery per Lineal Foot

Location	Size of Pipe 8"
Fredericton Housing Ltd. (Skyline Acres) Phase #1, April - June, 1966	\$ 3.79
Fredericton Housing Ltd. (Skyline Acres) Phase #2, October - November, 1966	4.14
Waggoner's Lane (Extension)	4.33

Materials in Stock, December 31, 1966:-

480 lineal feet of 8" T.C. Pipe @ \$0.86 per foot	\$ 412.80
35 lineal feet of 12" T.C. Pipe @ \$1.55 per foot	54.25
500 lineal feet of 8" Asbestos Pipe @ \$1.42 per foot..	720.00
90 lineal feet of 10" Asbestos Pipe @ \$1.73 per foot..	155.70
166 lineal feet of 12" Asbestos Pipe @ \$2.40 per foot	398.40
4 Pre-cast Manhole bottoms @ \$10.07 each	40.28
6 Manhole Covers and Frames @ \$44.28 each	241.68
TOTAL	\$ 2,023.11

CAPITAL ACCOUNT SURFACE SEWER

Gross Expenditure and Stocked Material ...\$	108,312.31
Less Inventory, December 31, 1966 ..	<u>7,949.94</u>
	\$ 100,362.37
Credits	<u>44,517.92</u>
Net Expenditure	<u>\$ 55,844.45</u>

Included in the net expenditure of \$55,844.45 is the amount of \$9,826.99 holdback from jobs completed in 1965 and showing in 1966 accounts.

The above credits are made up as follows:-

Chippin's Limited).....	\$ 3,991.17
Hill Bros.) Local	14,952.10
Fredericton Housing Ltd.) Improvement	13,271.91
Fredericton Housing Ltd.) Charges	3,744.22
(Dover Crescent))	
Work done and materials sold to Private Parties.....	1,984.86
Journal Voucher (Materials paid for by Capital	
Account Surface Sewer and sold to other	
City Departments)	<u>6,573.66</u>
TOTAL	<u>\$ 44,517.92</u>

Under this heading Surface Sewer Mains and cross-trenches were constructed at the following locations:-

Location	Concrete Pipe							
	10"	12"	15"	18"	24"	30"	36"	60"
F'ton Housing Ltd. (Skyline Acres) April-June, 1966	204	184	728	912				
F'ton Housing Ltd. (Skyline Acres) Oct. - Nov., 1966	39	478						
Liverpool St., Southampton Dr. to Vanier Highway	105							
Hill Bros., Stanley Street and Willingdon Street from Stanley St. to Smythe St.	216	1520						
Regent St. (offtake Ditches)	99	52	20					
Chippin's Ltd. (completion of Gregg Court and Grandame Street)	150	335						
Industrial Service Road	123							
Cameron Court	145	558	74	64				
King's College Road (offtake)	63							
Waggoner's Lane (extension) Through Easement, Mussen's property, Vanier Highway to College Hill Road	123	296	934	176				
Massey to Priestman (along easement)	210							
Mansfield Street			40					
City Back Drain								
TOTALS	=	1651	3423	1796	976	176	464	1136
								200

Total lineal feet all sizes .. 9,822

An itemized account was kept of installing Surface Sewers at the following locations and expenditures were made as follows:-

Location	Payment to Contractors Including Reserves for Holdbacks	City Labor and Machinery	Materials	Total
F'ton Housing Ltd., Skyline Acres April - June, 1966	\$ 5,796.64	\$ 7,475.27	\$ 13,271.91	
F'ton Housing Ltd., Skyline Acres Oct. - Nov., 1966	1,697.15	2,047.07	3,744.22	
Liverpool Street, Southampton Drive to Vanier Highway	287.31	241.90	529.21	
Hill Bros., Stanley St. and Willingdon St. from Stanley Street to Smythe Street	10,555.00	357.47	4,039.63	14,952.10
Regent Street (offtake ditches)		814.18	389.67	1,203.85
Chippin's Ltd. (completion of Gregg Court and Grandame Street)	2,510.25	116.52	1,364.40	3,991.17
Cameron Court	4,359.00	61.62	1,547.99	5,968.61
King's College Rd. (Offtake ditch)		341.86	139.21	481.07
Waggoner's Lane (Extension)		3,689.72	5,189.40	8,879.12
Easement, Mussen's property - Vanier Highway to College Hill Road		3,213.21	4,087.95	7,301.16
Massey to Priestman (along easement)		4,618.25	11,711.12	16,329.37
Mansfield Street		380.79	257.51	638.30
City Back Drain Diversion	1,604.19	4,594.18	6,198.37	
TOTALS =	\$17,424.25	\$ 22,978.91	\$ 43,085.30	\$ 83,488.46

All above costs include any holdback payments which will appear in 1967 accounts.

City Workmen and City Machinery installed Surface Sewers at the following locations:-

Fredericton Housing Ltd. (Skyline Acres)
Liverpool Street, Southampton Drive to Vanier Highway
Regent Street (Offtake Ditches)
King's College Road (Offtake Ditch)
Waggoner's Lane
Easement, Mussen's Property, Vanier Highway to College Hill Rd.
Easement, Massey Street to Priestman Street
Mansfield Street
City Back Drain Diversion

Following is the cost for laying various sizes of pipe, including Catch Basins in place by Contractors and City Workmen:-

Cost by Contractors per Lineal Feet

Location	Concrete Pipe		
	10"	12"	15"
Hill Bros., Stanley Street and Willingdon Street, Stanley to Smythe Street.....	\$ 8.46	8.64	
Chippin's Ltd., (Completion of Gregg Court and Grandame Street)	8.11	8.29	
Cameron Court	7.48	7.66	8.20

Cost by City Crews and City Machinery

Location	Concrete Pipe							
	10"	12"	15"	18"	24"	30"	36"	60"
F'ton Housing Ltd. (Skyline Acres)	\$ 5.96	6.14	6.68	7.27				
Liverpool Street, Southampton Dr. to Vanier Highway	5.04							
Regent Street (Offtake Ditches)	6.90	7.08	7.62					
Waggoner's Lane (Extension)	5.06	5.24	6.08		9.06			
Easement through Mussen's Property	7.12						12.52	
Easement, Massey to Priestman			6.44					14.15
City Back Drain Diversion								30.99

Stock on hand, December 31, 1966:-

162 Lineal feet of 10" Concrete Pipe @ \$0.92 per ft. . . .	149.04
844 Lineal feet of 12" Concrete Pipe @ \$1.10 per ft. . . .	928.40
158 Lineal feet of 15" Concrete Pipe @ \$1.64 per ft. . . .	259.12
130 Lineal feet of 18" Concrete Pipe @ \$2.23 per ft. . . .	289.90
32 Lineal feet of 24" Concrete Pipe @ \$4.92 per ft. . . .	157.44
92 Lineal feet of 30" Concrete Pipe @ \$6.32 per ft. . . .	581.44
524 Lineal feet of 36" Concrete Pipe @ \$9.35 per ft. . . .	4,899.40
 Catch Basins (Covers and Frames) 15 @ \$45.68 each	685.20
 TOTAL	\$ 7,949.94

CAPITAL ACCOUNT WATER

Gross Expenditure and	
Stocked Material	\$ 178,150.28
Less Inventory, Dec. 31, 1966	<u>30,758.99</u>
	\$ 147,391.29
Less Credits	<u>39,178.97</u>
Net Expenditure	\$ 108,212.32

Included in the net expenditure of \$108,212.32 is the amount of \$5,197.65 holdback from jobs completed in 1965 and shown in 1966 accounts.

The above credits are made up as follows:-

Chippin's Limited)	\$ 4,170.24
Hill Bros.)	Local	14,549.55
Fredericton Housing Ltd.)	Improvement	6,785.79
Don Grant) Charges	8.75
Fredericton Housing Ltd.)	(Dover Crescent)	5,136.41
Work done and materials sold to private parties			7,375.62
Journal Voucher (Materials paid for by Capital			
Account Water and sold to other City Departments			<u>1,152.61</u>
TOTAL			\$ 39,178.97

Water Main installations were made at the following locations:-

Location	Size of C.I. Pipe		
	4"	6"	8"
Fredericton Housing Ltd. (Skyline Acres) April - June, 1966		91	959
Fredericton Housing Ltd. (Skyline Acres) October - November, 1966		841	88
Hill Bros., Stanley Street and Willingdon Street from Stanley Street to Smythe Street		1322	353
Chippin's Ltd. (Completion of Gregg Court and Grandame Street)		557	
Hanwell Road, Parkhurst Drive to City Limits, Cameron Court and from end of Cameron Court to Hanwell Road Reservoir		1700	4099
Waggoner's Lane, extension	10	211	
TOTAL =	10	4722	5499
Total lineal feet, all sizes --	10,231		

An itemized account was kept of installing water mains at the following locations and expenditures were made as follows:-

Location	Payment to Contractors Including Reserves for Holdbacks	City Labor and Machinery	Materials	Total
F'ton Housing Ltd. (Skyline Acres) April - June, 1966	\$ 1,426.94	\$ 5,358.85	\$ 6,785.79	
F'ton Housing Ltd. (Skyline Acres) Oct. - Nov., 1966	1,363.61	3,772.80	5,136.41	
Hill Bros., Stanley St. and Willingdon St. from Stanley St. to Smythe St.	7,564.00	118.01	6,867.54	14,549.55
Chippin's Ltd. completion of Gregg Court and Grandame Street	1,763.05	188.00	2,219.19	4,170.24
Hanwell Road, Parkhurst Drive to City limits, Cameron Court and from end of Cameron Court to Hanwell Rd. Reservoir	22,507.00	3,889.10	33,575.48	59,971.58
Waggoner's Lane (extension)		580.69	995.75	1,576.44
TOTALS =	\$ 31,834.05	\$ 7,566.35	\$ 52,789.61	\$ 92,190.01

All above costs included any holdback payments which will appear in 1967 accounts.

City Workmen and City Machinery installed the Water Mains at the following locations:-

Fredericton Housing Ltd. (Skyline Acres)
Waggoner's Lane (Extension)
Ashfield Construction Ltd., installed the Water Mains at Hill Bros. subdivision, Hanwell Road, Cameron Court and end of Cameron Court to Hanwell Road Reservoir.

Everett Farris installed the Water Main on Gregg Court and Grandame Street.

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 not including fire hydrants.

Cost by Contractor per Lineal Foot

Location	Size of Pipe	
	6"	8"
Hill Bros., Stanley Street and Willingdon Street from Stanley Street to Smythe Street	\$ 8.43	9.68
Chippin's Ltd., Completion of Gregg Court and Grandame Street	7.49	
Hanwell Road, Parkhurst Drive to City Limits, Cameron Court and from end of Cameron Court to Reservoir, Hanwell Road	9.46	10.71

Cost by City Workmen and Machinery per Lineal Foot

Location	Size of Pipe	
	6"	8"
Fredericton Housing Ltd. (Skyline Acres) (Common trench and use of Fredericton Housing machinery and labor)	\$ 5.36	6.61
Waggoner's Lane (Extension)	7.47	

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

1. Drilling and Testing Well, Cameron Court
2. Construction of Pump House and supply of Equipment - Cameron Court
3. Construction of Reservoir, Hanwell Road
4. Water Exploration

1. Drilling and Testing Well

In 1966 a Well was drilled and tested in Cameron Court by Aden Sullivan at a cost of \$5,515.00. A temporary booster pump has been installed midway between Canadian National Railway Crossing on Hanwell Road and the City Limits to guarantee a sufficient water supply for the residents along Hanwell Road, until the new Well on Cameron Court comes into operation. This Well will be in operation early in 1967.

2. Construction of Pump House, Supply and Installation of Equipment - Cameron Court

Expenditure \$ 15,296.76

The above expenditure is made up as follows:-

T. McAvity and Sons (1 check valve)	\$ 79.18
Construction of Pump House (Fredericton Housing Ltd.)	8,850.00
Canadian General Electric (Transformer Switch)	670.53
International Water Supply (Supplying and Installing Pump).	5,262.00
Moncton Foundry (1000 Gallon Storage Tank)	173.66
Journal Voucher (City labor, materials and machinery) connecting from Main to Pump House	<u>261.39</u>
TOTAL	<u>\$ 15,296.76</u>

The construction of the Pump House has been completed and connections have been made from the Main on Cameron Court to the Pump House. The pump and instrumentation will be installed early in 1967.

3. Construction of Reservoir, Hanwell Road

A prestressed 100,000 Imperial Gallon concrete Water Reservoir was constructed this year on City property, Hanwell Road.

The expenditure amounted to \$19,383.45 and was made up as follows:-

Elmtree Concrete	\$ 74.25
The Canada Granite Co. .	17,910.00
Installation of Piping and Back Fill	<u>1,399.20</u>
TOTAL	<u>\$ 19,383.45</u>

The Reservoir was put in operation on October 18th and water is being supplied from the temporary Booster Pump situated on Hanwell Road, until the new Well on Cameron Court is operating.

4. Water Exploration

Expenditure \$ 11,033.07

The above expenditure is made up as follows:-

Sub Surface Surveys (Drilling 3 holes and placing pipe)	\$ 2,778.85
J. S. Neill Wholesale (Tees, bushings, couplings)	4.13
MacLaren Atlantic Ltd. (Study of future Water supply)....	1,194.97
Maritime Water Supply Ltd. (Drilling and testing Well, St. Anne's Point)	5,890.00
Journal Voucher (Machinery)	479.50
Journal Voucher (City Labor)	<u>685.62</u>
TOTAL	<u>\$ 11,033.07</u>

Drilled and Tested Well, St. Anne's Point,
Woodstock Road.

In order to ensure that an ample supply of water is available for the south side system, a test hole exploration program was commenced in 1965.

This program was culminated with the drilling and test pumping of a pilot Well at St. Anne's Point Barracks. At the present time, the consulting firm of MacLaren Atlantic Limited are studying the results of this pilot Well in order to arrive at a recommended course of action to follow to augment the present supply.

At the time of writing of this report, it would appear that a supply of 900 I.G.P.M. would be available from the St. Anne's Point Area. However, it would also appear that treatment for manganese removal will be necessary.

A summary of ground water exploration and development costs from 1953 to date is as follows:-

Cost of Well Water Supply to Date (South Side)

Exploration

1953 Test Hole Program	\$ 7,500.00 ✓
1954 Supply line and partial development #1 Well	42,271.16 <i>partial</i>
1955 Develop, House and Connecting of #1 Well	22,883.05
1956 Remote Control and Landscaping	3,048.33
1957 Develop, House and Connecting of #2 Well	44,217.72
1958 Holdbacks, etc.	7,641.01
1958 and 1959 Test Hole Program	24,294.40 ✓
1960 and 1961 Develop, House and Connecting of #3 Well.	46,554.32
1961 Develop, House and Connecting of #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 Develop, House and Connecting Cameron Court Well, less installation of pumping equipment.	20,811.76
1966 Test Hole Program (continuation of 1965 program)..	5,143.07 ✓
1966 Drilling and Testing Well St. Anne's Point - Woodstock Road	<u>5,890.00</u> <i>- see prev. page</i>
TOTAL	<u>\$ 287,697.76</u>

Capacity available 2300 I.G.P.M.
Present Average Demand 1207 I.G.P.M.
Maximum Demand .. 1510 I.G.P.M.

CAPITAL ACCOUNT GRAVEL ROADS

Gross Expenditure	\$ 86,520.43
Credits	<u>38,605.22</u>
Net Expenditure	<u>\$ 47,915.21</u>

The above credit of \$38,605.22 is made up as follows:-

Chippin's Ltd.).....	\$ 5,916.11
Hill Bros.	}.... Local	13,612.97
Fredericton Housing Ltd. (Phase #1)	}... Improvement.	7,793.94
Don Grant	}... Charges ...	23.75
Fredericton Housing Ltd. (Dover Crescent, Phase #2)).....	8,927.62
Government of Canada (Winter Works N.B.-37, Stanley and Willingdon Streets)		993.84
Government of Canada (Winter Works N.B.-56, Wright Street).....		456.55
Government of Canada (Winter Works N.B.-57, Parkside Drive)		594.27
Government of Canada (Winter Works N.B.-88, Waggoner's Lane)		147.57
Journal Voucher (Gravel from Roads and Streets) ...		<u>138.60</u>
TOTAL	\$ 38,605.22	

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 the heading "Capital Account Curb and Gutter", which is contained in the body of this report on page 23.

2. Gravel Road Construction

The following Streets were constructed and gravelled under this heading:-

<u>Location</u>	<u>Lineal Feet</u>
Gregg Court) Chippin's Limited	100
Grandame Street)	490
Stanley Street) Hill Bros.	1,220
Willingdon Street)	310
Cameron Court	600
Waggoner's Lane	300
Dover Crescent) Fredericton Housing Ltd.	850
Southampton Drive)	<u>950.</u>
TOTAL	4,820

4,820 lineal feet = .91 miles

An itemized account was kept of constructing and
gravelling Streets at the following locations:-

Location	Payment to Contractors Including Reserves for Holdback	City Labor and Machinery	Materials	Total
Fredericton Housing Ltd. (Skyline Acres) April - June, 1966	\$ 1,731.45	\$ 6,062.49	\$ 7,793.94	
Fredericton Housing Ltd. (Skyline Acres) Oct. - Nov., 1966	859.62	8,068.00	8,927.62	
Hill Bros., Stanley St. and Willingdon St. from Stanley St. to Smythe Street (1965-1966)	4,151.38	9,461.59	13,612.97	
Chippin's Ltd. (completion of Gregg Court and Grandame St.)	1,160.70	4,755.41	5,916.11	
Cameron Court (600') Waggoner's Lane (extension)	2,568.81 4,563.98	4,066.34 7,154.70	6,635.15 11,718.68	5,000.00 10,000.00
Parkside Drive, clearing- Winter Works (1965-1966)	1,454.61			1,454.61
Wright St., clearing, stumping, Winter Works (1965-1966)	2,234.89	4.89	2,239.78	
Priestman St. (clearing right-of-way)		77.94	77.94	
TOTAL =	\$ 18,725.44	\$ 39,651.36	\$ 58,376.80	

In addition, .45 miles of new Road was constructed
and gravelled near the Doak Road and parallel to the
Vanier Highway and appears under the heading "Capital
Account Industrial Road."

CAPITAL ACCOUNT FOREST HILL ACCESS ROAD

In 1964 the City of Fredericton entered into a contract with Diamond Construction Company (1961) Limited to construct a new access road to Forest Hill.

The construction was commenced in 1964 and completed in 1965 but some expenditures and credits were not included in 1965 but show in 1966 accounts.

Preliminary work such as acquiring certain properties and surveying by Anric Engineering Limited was done in 1963.

Expenditures to December 31, 1966 were made up as follows:-

Expenditure 1963	\$ 10,285.34
Expenditure 1964	48,363.81
Expenditure 1965	<u>69,837.87</u>
Total Expenditures (1963-1965)	\$ 128,487.02
Less shared cost items submitted to Provincial Government 1963 - 1965	<u>45,269⁷⁰.77</u>
Total net cost to City of Fredericton 1963-1965....	\$ 83,21 0 ⁰ .25
Expenditure (1966)	<u>13,483.28</u>
	\$ 96, 099 ⁰ .53
Less Credits (1966)	<u>7,470.39</u>
Total Net cost to City of Fredericton (1963-1966).....	\$ 89,2 09 ⁰ .14
+Non Shareable ---	<u>742.77</u>
	\$ 89,971.91

For the above expenditure the Road was constructed and paved, curb and gutter was laid, an asphalt sidewalk was constructed along the south side of the Road and signal lights were installed at the Railway Crossing. Surface Sewers were also installed where necessary.

CENTENNIAL PROJECTS

The Fredericton City Council in 1965 accepted the recommendations of the appointed Centennial Committee to carry out works in Odell Park and on an area at the intersection of McEvoy and Noble Streets, as the Centennial Projects to commemorate the centenary of Confederation.

The Federal and Provincial Governments have initiated the commemoration of the Centennial by assisting municipalities to the extent of one dollar per capita from each level of Government towards the projects.

CAPITAL ODELL PARK CENTENNIAL

Expenditure \$ 17,720.63

The above expenditure is made up as follows:-

B. A. Ackroyed (Timber from Old Catholic Church)	\$ 200.00
W. R. and W. W. Thomas (366 yards topsoil @ \$1.80 per yd.)	478.80
Capital Garden Supply (150# grass seed)	56.25
Topmar Housing (Construction of Building-Prog. Payments)	14,029.00
Journal Voucher (dynamite, detonators, cement and sand).	4.14
Journal Voucher (Materials used on Domestic Sewer installation)	891.05
Journal Voucher (Materials used on Water Service installation)	766.76
Journal Voucher (City Machinery)	722.50
Journal Voucher (City Labor)	<u>572.13</u>
TOTAL	\$17,720.63

The development of Odell Park as a Centennial Project continued in 1966.

A Lily Pond was constructed which will also serve as an outdoor skating rink during the winter months.

Selective cutting of Balsam Fir was carried out during the winter months.

Topsoil, seeding, tree planting and general improvements of a minor nature at various locations was the extent of the work carried out by the caretaker during the year, together with the required maintenance.

A contract was awarded to Topmar Housing Construction for the construction of a building in the Park which will serve as a meeting place for groups using the facilities in the Park, as well as a nature interpretation centre.

City crews and machinery installed the water and sewer to the new building late in the fall of 1966 and as a result of the lateness of the season, considerable regrading, topsoiling and seeding will have to be carried out in 1967.

To date the expenditure on this project is as follows:-

1965 Expenditure	\$ 10,009.63
1966 Expenditure	<u>17,720.63</u>
TOTAL	\$ 27,730.26

f Rd. Inv.
(Net) ?? *(8778.50)*

CENTENNIAL PARK - CARLETON WARD

Expenditure \$ 9,927.24

The above expenditure is made up as follows:-

W. R. and W. W. Thomas (1014.3 yds. topsoil @ \$1.80 per yard)	\$ 6,010.20
Frank Smith (392 yards topsoil @ \$1.80 per yard)	705.60
John Gibson and Sons (grass seed)	283.00
J. C. Risteen Co. (Stakes)	10.09
Journal Voucher (City machinery)	1,873.00
Journal Voucher (City labor)	<u>1,045.35</u>
TOTAL	\$ 9,927.24

The area selected in Carleton Ward has been graded, topsoiled and seeded in preparation for further development as an athletic field.

The funds for this development have been expended and further development of the area will require funds from another source.

The total expenditure on this project amounted to \$14,992.04 and was made up as follows:-

1965 Expenditure	\$ 5,064.80	Net - \$ 1326.50
1966 Expenditure	<u>9,927.24</u>	
Total	\$ 14,992.04	

CAPITAL ACCOUNT INDUSTRIAL AREA

Expenditure \$ 25,763.61

Included in the above expenditure are the following:-

1. Development of Industrial Area
2. Clearing of Industrial Area
3. Construction of a Service Road,
Industrial Area

1. Development of Industrial Area

In 1965, under this heading the City of Fredericton received \$5,000.00 from the New Brunswick Development Corporation for grading at Pyramid Homes location on Wilsey Road. This work was completed in 1966.

The 1966 expenditure under this heading amounted to \$2,304.28 and was made up as follows:-

Labor	\$ 126.25
Hired Trucks and Machinery ..	9.00
City Machinery	250.00
Materials (gravel, pipe, cement)	1,300.75
Surveying Industrial Lots ...	<u>618.28</u>
TOTAL	<u>\$ 2,304.28</u>

2. Industrial Road Clearing

In 1966 a Service Road, parallel to the Vanier Highway in the vicinity of F. E. Daniels and Sons Ltd., west of the Doak Road, was constructed a distance of 2,350 feet at a width of 66 feet, to take care of future development in this area.

The area was cleared, lumber was salvaged and bushes were cut and burned. Also included under this heading was the clearing of a section of the Wilsey Road from the Doak Road east, a distance of 400 feet. This construction was done in order to straighten out the alignment of the existing road.

The cost of clearing the above areas was as follows:-

Labor	\$ 1,273.41
Hired Trucks and Machinery.	100.00
City Machinery	1,252.00
Materials	<u>11.45</u>
Gross Expenditure	\$ 2,636.86
<u>Less Credit, Government of Canada (Winter Works N.B.-68, Clearing Industrial Sewer Road).</u>	<u>578.65</u>
Net Expenditure	<u>\$ 2,058.21</u>

3. Capital Account Service Road

The cost of construction of the Service Road and rebuilding a section of the Wilsey Road was as follows:-

Labor	\$ 1,794.85
Hired Trucks and Machinery	44.00
City Machinery	2,714.00
Materials (Gravel, stakes, cement, pipe)	<u>16,848.27</u>
TOTAL	<u>\$ 21,401.12</u>

For the above expenditure, stumps were taken out and removed, gravel applied to the roads and culverts installed where necessary.

CAPITAL ACCOUNT TRAFFIC LIGHTS

Expenditure \$ 703.50

The above expenditure was the amount charged by Cameron, Grant and Associates for preparing specifications and copies of plans for the installation of traffic lights at the corner of Beaverbrook and Regent Streets.

LOCAL IMPROVEMENT

- 1966 -

In 1966, the Local Improvement By-Law was amended to full cost of initial services to the subdivider.

The following summary of Local Improvement Projects undertaken in 1966 show the actual cost of construction which was paid for by the subdivider, including holdback payments.

<u>LOCATION</u>	<u>SERVICE</u>	<u>COST</u>	<u>NO. OF LOTS</u>
Southampton Drive	Water	\$ 6,785.79	
	Domestic Sewer	5,060.99	
Fredericton Housing Phase #1	Storm Sewer	13,271.91	23
	Gravel Road	7,793.94	
	Sidewalks	1,849.50	
	TOTAL	\$ 34,762.13	
		<hr/>	
Stanley and Willingdon Streets Hill Bros.	Water	\$ 14,549.55	
	Domestic Sewer	8,292.52	
	Storm Sewer	14,952.10	31
	Gravel Road	13,612.97	
	Sidewalk	3,286.35	
	TOTAL	\$ 54,693.49	
		<hr/>	
Grandame Street Gregg Court Chippin's Ltd.	Water	\$ 4,170.24	
	Domestic Sewer	2,176.34	
	Storm Sewer	3,991.17	
	Gravel Road	5,916.11	13
	Sidewalk	999.00	
	TOTAL	\$ 17,252.86	
		<hr/>	

<u>LOCATION</u>	<u>SERVICE</u>	<u>COST</u>	<u>NO. OF LOTS</u>
Dover Crescent	Water	\$ 5,136.41	
Fredericton Housing	Domestic Sewer	3,104.19	
Phase #2	Storm Sewer	3,744.22	
	Gravel Road	8,927.62	17
	Sidewalk	1,941.08	
	TOTAL	\$ 22,853.52	

SUMMARY
of
COSTS TO SUBDIVIDERS FOR SERVICES-1966

<u>SERVICE</u>	<u>COST</u>	<u>NO. OF LOTS</u>
Water	\$ 30,641.99	
Domestic Sewer	18,634.04	
Storm Sewer	35,959.40	
Gravel Road	36,250.64	84
Sidewalk	8,075.93	
TOTAL	\$ 129,562.00	

NOTE: Fredericton Housing supplied and operated their own machinery on certain phases of their projects, when the machinery was required and available.

PUBLIC WORKS

Gross Expenditure	\$ 35,761.45
Credits	<u>2,110.45</u>
Net Expenditure	\$ 33,651.00
1966 Appropriation .	<u>31,100.00</u>
Debit	\$ 2,551.00
	<u> </u>

The credits of \$2,110.45 are made up as follows:-

Sale of Maps to Private Parties (City of Fredericton) ...\$	38.40
Don Forbes (Sale of 2 Benches)	20.00
Department of Public Works (Cleaning wharf and removing shed)	179.32
Journal Voucher (Machinery)	489.00
Journal Voucher (Mobile Phones)	1,335.76
To correction of Miles invoice (Error in entry)	<u>47.97</u>
TOTAL	\$ 2,110.45
	<u> </u>

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

<u>ITEM</u>	<u>LABOR</u>	<u>HIRED TRUCKS</u>	<u>CITY MACHINERY</u>
Trees	\$ 12,480.75	\$ 278.50	\$ 3,804.50
Back Drain Diversion	5.03		2.00
Back Drain	66.10		8.00
Survey	879.95		
Surface Sewer	29.79		
Unforseen	3,949.53	255.00	430.00
Casuals' Vacation Pay	<u>2,491.28</u>		
TOTALS =	<u>\$ 19,902.43</u>	<u>\$ 533.50</u>	<u>\$ 4,244.50</u>
	<u> </u>	<u> </u>	<u> </u>

Trees:-

Expenditure\$ 20,250.64

The above expenditure is made up as follows:-

Labor	\$ 12,480.75
Hired Trucks	278.50
City Machinery	3,804.50
Materials	3,086.89
Mr. Charles Smith (Honorarium for services rendered)	600.00
TOTAL	<u>\$ 20,250.64</u>
	<u> </u>

In 1966, 82 trees were removed on 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 1966:-

Birch	2
Oak	1
Elm	56
Ash	1
Basswood	1
Maple	7
Spruce	1
Dutch Elm	12
Mountain Ash	<u>1</u>
TOTAL	<u>82</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 this office.

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:-

326 University Avenue	1
Shaws Brick Yard, Woodstock Road ...	4
634 MacLaren Avenue	1
860 Barker Street	1
761 MacLaren Avenue	1
356 Union Street	1
364 Union Street	2
122 Waterloo Row	<u>1</u>
TOTAL	<u>12</u>

Following is the number of trees removed from 1961 to 1966 with Dutch Elm Disease:-

1961	2
1962	2
1963	1
1964	14
1965	8
1966	<u>12</u>
TOTAL..	<u>39</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 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 1966 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>
Montgomery Street, Smythe to York Street	42
Montgomery Street, Regent Street to College Hill Road ...	18
Gregg Court	11
Jones Street	13
York Street, Montgomery Street to Mansfield Street	7
Pederson Crescent	9
Mansfield Street	10
Pembroke Crescent	22
King's College Road, York St. toward Smythe Street	18
Birch Court	8
Waggoner's Lane	15
Colter Court	2
Highland Avenue	10
Noble Street	31
Bailey Drive and Perley Court	14
Irvine Street	9
Canterbury Drive	17
Cambridge Crescent	33
Coventry Crescent	28
TOTAL	317

41 trees were replaced in 1966 at various locations in the City due to loss through dry weather and vandalism.

Under the above heading the following trees were purchased in 1966 from Lansdowne Nursery:-

80 Norway Maples (8-10')	@ \$4.50 each	\$ 360.00
65 Norway Maples (8-9')	@ \$4.00 each	260.00
44 Silver Maples (8-10')	@ \$4.50 each	198.00
50 Crimson King Maples (8-10')	@ \$5.25 each	262.50
21 Crimson King Maples (7-8')	@ \$4.90 each	102.90
5 Schwedler Maples (8-10')	@ \$5.25 each	26.25
11 Tilia Cordata (8-10')	@ \$4.50 each	49.50
2 Tilia Pallida (8-10')	@ \$4.25 each	8.50
40 Little Leaf Linden (8-10')	@ \$4.50 each	180.00
40 Emperor Linden (8-10')	@ \$4.25 each	170.00
TOTAL	\$ 1,617.65	

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

With the addition of this machine, 71 stumps were removed at various locations on City Streets at an expenditure of \$815.98 and was made up as follows:-

Labor	\$	693.61
Machinery Charges	<u>\$</u>	<u>122.37</u>
TOTAL	\$	815.98

Back Drain Diversion:-

Under this heading the expenditure amounted to \$7.03 and was labor and city machinery charged for general maintenance (Cleaning catch basins, culvert entrances and outfalls).

Back Drain:-

The expenditure under this heading amounted to \$74.10, made up as follows:-

Labor	\$	66.10
City Machinery	<u>\$</u>	<u>8.00</u>
TOTAL	\$	74.10

The above expenditure was for general maintenance to Drain.

Surveying:-

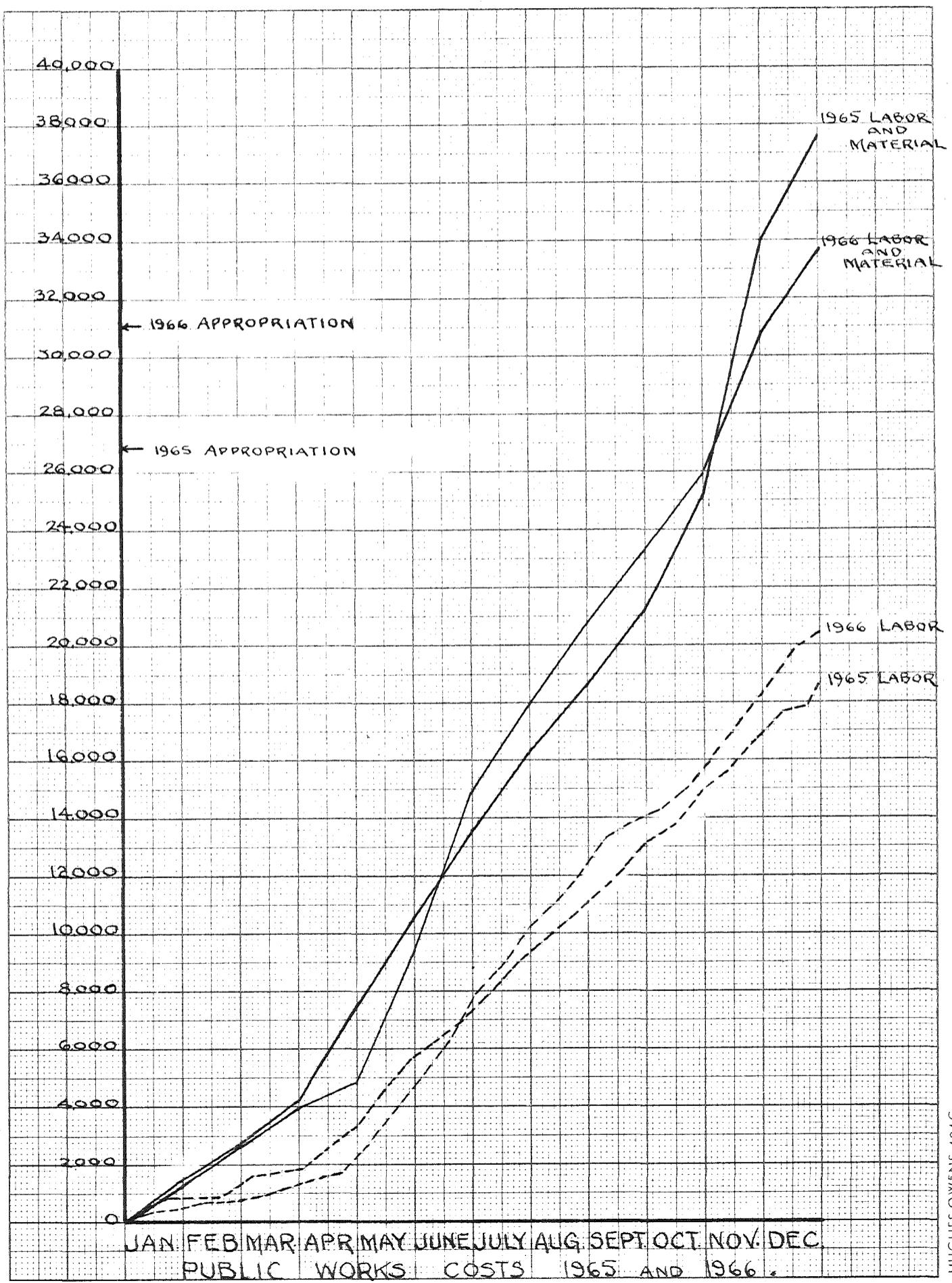
Under this heading, expenditure amounted to \$1,386.55, made up as follows:-

Labor	\$	879.95
Materials	<u>\$</u>	<u>506.60</u>
TOTAL	\$	1,386.55

The labor charge of \$879.95 was for helpers with the Engineers during the course of their work during 1966, on other than programmed projects.

The material charges of \$506.60 were made up as follows:-

Seaboard Surveys (Surveying Queen Square)	\$	340.95
John Trainor (Staking lots and printing plans)		35.00
Federal Hardware (Metallic tape)		12.31
Kelvin Hughes (Repairs to level)		87.00
J. C. Risteen Co. (Stake)		6.70
J. S. Neill & Sons Wholesale (cord, paint, crayons, etc.)	<u>\$</u>	<u>24.64</u>
TOTAL	\$	506.60



Surface Sewers:-

Expenditure \$ 29.79

The above expenditure was the amount incurred on further construction of an off-take ditch from the main sewer on Inglewood Drive extending to the Valley Track in 1965.

Unforseen Account - Labor and Hired Trucks:-

Removal of Christmas Trees from City Streets	\$ 346.56
Marking Domestic Sewer Outlet, St. John River	22.08
Removal of furniture	10.14
Benches (Painting and Repairs)	156.78
Clearing Brush	17.76
Greens (Cutting, raking, seeding, topsoil, etc.)	3,115.80
Sir James Dunn Fountain	54.48
Spraying mosquito infested areas	30.84
Taking of Inventory, 1966	6.52
Armistice and Salvation Army stands	170.66
Engineer's Report	137.37
Cleaning Wharf and tearing down Freight Shed.	<u>135.54</u>
TOTAL	\$ 4,204.53

The total expenditure amounted to \$9,411.61, made up as follows:-

Labor	\$ 3,949.53
Hired Trucks	255.00
City Machinery	430.00
Materials	<u>4,777.08</u>
TOTAL	\$ 9,411.61

Casuals' Vacation Pay:-

The total amount under this heading was \$2,491.28 for Casual Labor Vacation Pay.

Odell Park:-

Gross Expenditure	\$ 13,732.87
Credits	<u>5,014.08</u>
Net Expenditure	\$ 8,718.79

Included in the above are the following:-

1. Odell Park Clearing
2. Odell Park Maintenance

1. Odell Park Clearing

Gross Expenditure	\$ 7,853.72
Less Credits	<u>4,692.08</u>
Net Expenditure	\$ 3,161.64

The above credits of \$4,692.08 was made up as follows:-

Diamond Construction (1961) Ltd., Sale of Lumber	\$ 2,363.00
Government of Canada (Winter Works N.B.- Project 38)	<u>2,329.08</u>
TOTAL	\$ 4,692.08

The expenditure of \$7,853.72 was made up as follows:-

Labor	\$ 4,653.77
Hired Equipment (Trucks and Horses)	1,349.50
City Machinery	1,783.50
Materials (Gas, diesel fuel, files, peavies, etc.)	<u>66.95</u>
TOTAL	\$ 7,853.72

An area of approximately eight acres has been cleared and stumped in the southerly section of the park.

This area is to be developed as an athletic field with progress depending on funds being made available for same.

2. Odell Park Maintenance:-

Gross Expenditure	\$ 5,879.15
Credits	<u>322.00</u>
Net Expenditure	\$ 5,557.15

The above credits are made up as follows:-

Board of School Trustees (Mowing grass at Race Track)	\$ 224.00
Journal Voucher (Use of Tractor, Campbell St. Parking Lot)	<u>98.00</u>
TOTAL	\$ 322.00

The above expenditures are made up as follows:-

J. S. Neill & Sons Ltd. (Roofing and miscellaneous items)	\$ 286.88
John Gibson and Sons (Grass seed)	116.50
E. M. Young (Paint)	19.16
W. R. and W. W. Thomas (Topsoil)	100.80
H. S. Gill and Sons (Lumber)	94.63
Fredericton Welding and Machine Shop (Welding Lawn mower handle)	8.31
Province of New Brunswick (Vehicle registration)	2.00
Miles Tire Ltd. (Repair, tire and tube, core housing) ...	19.62
Workmen's Compensation (Assessment for 1966)	123.75
City Heat and Electric (Repairs to Mower)	73.65
Lansdowne Nursery (3 Flowering Crabs)	15.00
Provincial Motor Sales (Oil Filters)	5.79
Capital Garden Supply (Grass seed)	56.25
Frank A. Blaney (Repairs to tractor)	248.90
Halifax Seed Co. (2 Cyclone seeders)	12.71
Associated Designers (Appraisal re house)	35.00
N. B. Telephone Co. (Phone)	50.64
Millar Motors (Repairs to chain saw)	29.32
Journal Voucher (Concrete pipe)	13.80
Journal Voucher (Machinery)	99.00
Journal Voucher (Gas, Oil, Antifreeze)	<u>26.07</u>
TOTAL	\$ 1,437.78

Included in the above expenditure was the reroofing of the Caretaker's House at Odell Park.

CARLETON PARK

Expenditure\$ 3,868.71

The above expenditure of \$3,868.71 is made up as follows:-

J. S. Neill & Sons Ltd. (Edger, grass, shears, paint, fencing)	\$ 32.70
Craig Electric (Repairs to mower)	16.29
W. R. and W. W. Thomas (Topsoil)	63.00
Crane Supply (1-#8-36 Magiclose faucet)	9.72
Marathon Realty (Taxes on property)	447.02
Horsnell's Ltd. (Boundary stakes)	23.18
Journal Voucher (Rock Dust)	15.00
Journal Voucher (Gas)	2.76
Journal Voucher (Machinery)	241.00
Journal Voucher (Labor)	2,318.04
Marathon Realty (Rental on Park)	<u>700.00</u>
TOTAL	\$ 3,868.71

WILMOT PARK

Expenditure \$ 4,527.49

The expenditure of \$4,527.49 was made up as follows:-

Material used on Lawns and Flower Beds	\$ 173.63
Supplies and Repairs to Lawn Mowers	10.13
Material and Labor charges expended on Caretaker's House ..	79.86
Lighting Wilmot Park (14-4' Fluorescent Lamps)	840.00
Journal Voucher (Machinery)	200.50
Journal Voucher (Gas, Oil)	14.57
Journal Voucher (Hired machinery)	240.00
Journal Voucher (Labor)	2,937.80
Journal Voucher (Water Rates)	25.00
Journal Voucher (Domestic Sewer)	6.00
TOTAL	\$ 4,527.49

CLEARING PARK AREAS

Gross Expenditure	\$ 1,690.74
Credit	<u>300.73</u>
Net Expenditure	\$ 1,390.01

The above credit of \$300.73 was the amount received from the Government of Canada Winter Works Project N.B.-33 (Montgomery-Campbell Park).

The above expenditure was for the completion of clearing the Park Area (Montgomery-Campbell) and underbrushing and clearing dead wood from Park Area between Stanley Street and Massey Street.

RECREATION

Expenditure \$ 1,478.41

The above expenditure does not include all playground expenditure, 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 \$1,478.41 is made up as follows:-

W. R. and W. W. Thomas (Sand)	\$ 37.80
Journal Voucher (Gas and Oil)	163.34
Journal Voucher (City Machinery)	258.00
Journal Voucher (Sand, concrete, copper pipe)	37.90
Journal Voucher (City labor)	231.37
Journal Voucher (Water used in 1966 Swimming Pools)	500.00
Journal Voucher (Water used in 1966, Wading Pools & Rinks)	<u>250.00</u>
TOTAL	\$ 1,478.41
	<u><u> </u></u>

The above labor and hired truck charges of \$231.37 are made up as follows:-

Outdoor Rinks	\$ 15.06
Playgrounds	212.91
Repairs to truck	<u>3.40</u>
TOTAL	\$ 231.37
	<u><u> </u></u>

CITY HALL

Expenditure\$ 360.61

The above cost 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 \$360.61 is made up as follows:-

J. S. Neill & Son Wholesale (Air-valve, paint, crack filler, caulking cement and pipe fitting) ..	\$ 34.65
Journal Voucher (City machinery)	4.00
Journal Voucher (Water used in 1966)	100.00
Journal Voucher (Sewer Rental 1966)	50.00
Journal Voucher (Sprinkler charge 1966)	25.00
Journal Voucher (Labor)	<u>146.96</u>
TOTAL	\$ 360.61
	<u><u> </u></u>

DOMESTIC SEWER

Labor cost	\$ 16,555.46
Hired trucks and machinery costs	229.75
City Machinery cost	9,062.00
Material cost	<u>14,975.57</u>
Gross Expenditure.....	\$ 40,822.78
Credits	<u>23,226.70</u>
Net Expenditure	\$ 17,596.08

The above credits are made up as follows:-

Material, Labor and Machinery supplied for house	
connections	\$ 21,770.58
Work done for Private Parties (cleaning floor drain	
and pumping out ducts)	199.26
J. S. Neill & Son Wholesale (sale of 190' of 4"	
Transite Pipe)	79.80
Town of Woodstock (Rental on Sewer Cleaner)	200.00
Town of Marysville (Sale of 60' of 6" Transite Pipe)	50.40
Journal Voucher (Materials, Capital Account Odell Park	
Centennial)	770.66
Journal Voucher (Sewer Rental Fire Department)	100.00
Journal Voucher (Sewer Rental City Hall)	50.00
Journal Voucher (Sewer Rental Wilmot Park)	6.00
TOTAL	\$ 23,226.70

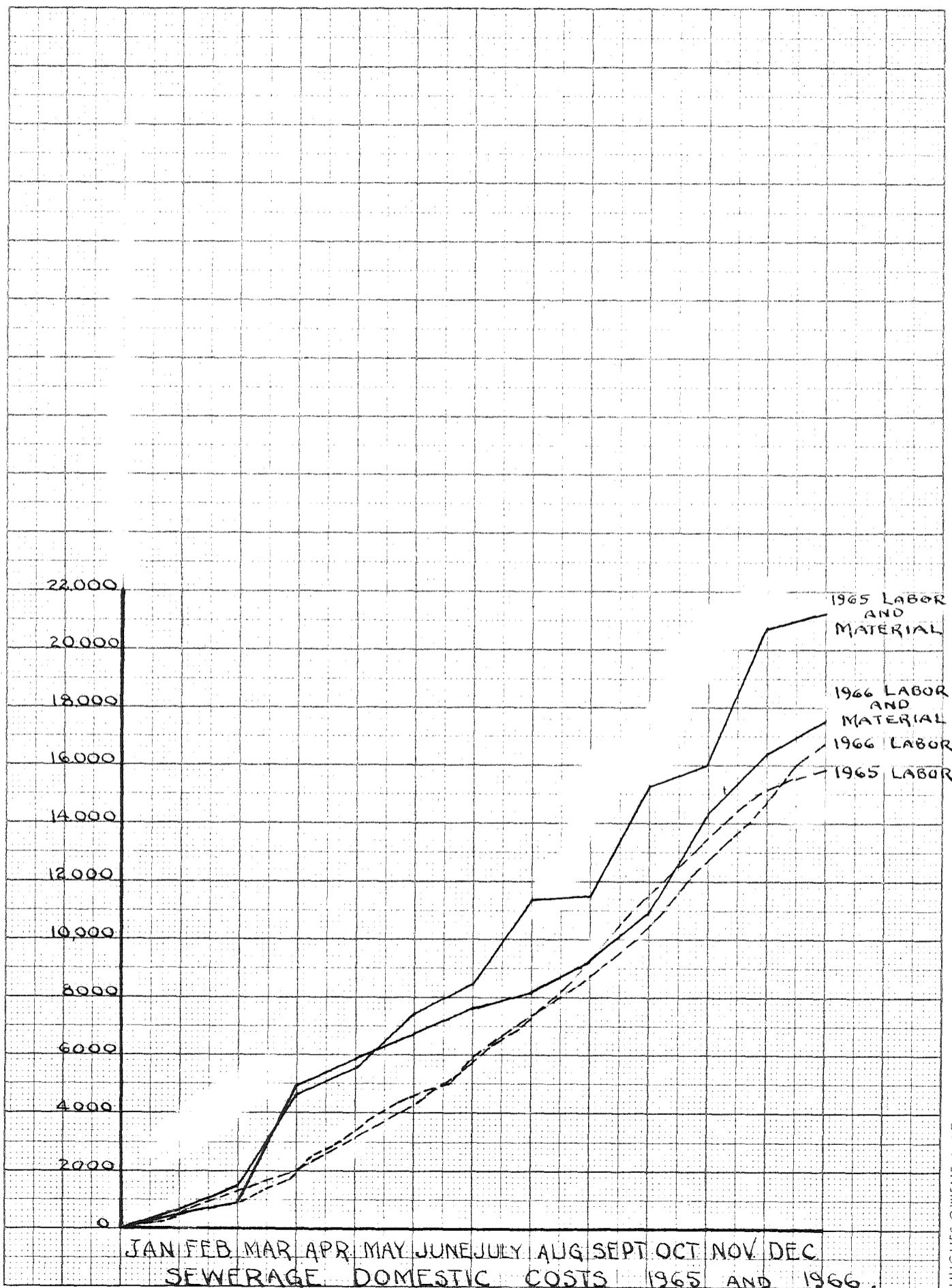
New customers connected to the City Sewer System in 1966 totalled 192.

No Domestic Sewer extensions were made under this heading but do appear under "Capital Account Sewer Domestic."

All Sewer Mains were cleaned and flushed in 1966.

The Fredericton Domestic Sewer System consists of 60.93 miles (12.46 miles in Carleton Ward and 48.47 miles in the City proper) 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
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 Pipe92 miles
8" Terra Cotta Pipe	35.38 miles
12" Transite Pipe	0.53 miles
12" Corrugated Iron Pipe ...	0.07 miles
10" Transite Pipe	1.24 miles
8" Transite Pipe	11.61 miles
8" Cast Iron Pipe	0.04 miles
6" Transite Pipe	0.02 miles
6" C.I. Force Main	<u>0.30 miles</u>
TOTAL	60.93 miles



HUGHES OWENS 404G

OLD BURIAL GROUND

The Old Burial Ground between Brunswick and George Streets was kept in good condition in 1966.

The tombstones that could be repaired and were not too seriously damaged by vandals were repaired. The grass was kept mowed and sodding and seeding was done where necessary.

Gross Expenditure	\$ 2,072.76
Credits	<u>324.00</u>
Net Expenditure	\$ 1,748.76

The above credit was the amounts received from interest on Trust Funds and Bonds.

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

City Heat and Electric (Repairs to Mower)	\$ 29.57
Auto Machinery (1 Funnel with screen)61
J. S. Neill & Son Wholesale (paint)	3.58
Perley's B. A. Service Station (5 Gallons Gas)	4.93
Maritime Electric Co. (6 Fluorescent Lamps)	450.00
Journal Voucher (Gas and Oil)	3.22
Journal Voucher (Machinery)	46.50
Journal Voucher (Labor)	<u>1,534.35</u>
TOTAL	\$ 2,072.76

FIRE DEPARTMENT

Expenditure\$ 12,185.39

The above expenditure is made up as follows:-

W. W. and W. R. Thomas (Topsoil)	\$ 12.60
Seaboard Surveys (3 Prints of Water Main System)	9.27
Journal Voucher (2533.6 Gallons Gas)	582.74
Journal Voucher (464 hydrants - rental)	11,136.00
Journal Voucher (Machinery)	12.00
Journal Voucher (Sewer Rental 1966)	100.00
Journal Voucher (Water used in 1966)	300.00
Journal Voucher (Labor)	<u>32.78</u>
TOTAL	\$ 12,185.39

CEMENT WALKS

Expenditure \$ 20,633.10

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

<u>Location</u>	<u>Lineal Feet</u>
Regent Street, end of 1965 construction to near Vanier Highway (west side)	1,800
Oxford Street, York Street to Simcoe Court (north side)	495
Lorne Street, Montgomery Street to Bessborough Street (west side)	315
Bessborough Street, Lorne Street to Massey Street (north side)	1,145
Massey Street, Smythe Street to Bessborough Street (north side)	328
Rochester Street, Canterbury Drive to Leeds Drive (west side)	860
Leeds Drive, Rochester Street to Southampton Drive (west side)	1,683
Liverpool Street, Canterbury Drive to Southampton Drive (west side)	785
Southampton Drive (Liverpool Street to Leeds Drive (south side)	375
Hillcrest Drive, Clark Street to Forbes Street (south side)	255
Noble Street, completion of sidewalk (east side)	176
Irvine Street, Noble Street east (south side)	474
Bailey Drive, Perley Court to Kennedy Court (south side)....	300
Squires Street, end of existing sidewalk to Regent Street (north side)	400
TOTAL	<u>9,391</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 Subdividers.

The concrete for the above construction of sidewalks was obtained from Elmtree Concrete Limited @ \$14.85 per cubic yard.

The property owner was charged \$1.10 per lineal foot which does not include Compensation, Pension Fund and Holiday Fund.

SANITATION

Gross Expenditure	\$ 113,908.28
Credit	<u>556.97</u>
Net Expenditure	<u>\$ 113,351.31</u>

The above credit of \$556.97 was made up as follows:-

J. S. Neill & Son Wholesale (Partial credit on broom handles)	\$ 2.97
Forest Hill Cemetery Co. (Digging graves)	24.00
Rental on Flusher	<u>530.00</u>
TOTAL	<u>\$ 556.97</u>

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

1. Garbage Collection
2. Sanitary Land Fill
3. Street Cleaning

1. Garbage Collection:-

The Garbage Collection was operated by H. R. Corey (Fredericton) Ltd., but on July 1st was taken over by the Capital Sanitation Company. The amount paid for this operation was \$48,622.14 in 1966.

2. Sanitary Land Fill:-

Expenditure\$ 15,752.68

The above expenditure is made up as follows:-

Horsnell's Ltd. (Making iron frames for signs)	\$ 10.30
J. S. Neill & Son Wholesale (Keys)	2.05
Daily Gleaner (Printing notices)	30.10
Forbes and Sloat (600.60 tons Gravel @ \$1.65 per ton)...	990.99
Journal Voucher (Diesel Fuel)	2.24
Journal Voucher (Hired Trucks)	3.50
Journal Voucher (Machinery)	1,026.00
Journal Voucher (Labor)	1,259.78
Mr. Kenneth L. Barker	2,073.62
Shiretown Construction Co.	<u>10,354.10</u>
TOTAL	<u>\$ 15,752.68</u>

In 1966 the five year contract awarded to Mr. Kenneth L. Barker for bulldozing services at the Sanitary Land Fill expired and a new contract for five years was awarded to Shiretown Construction Company at a cost of \$12,424.92 per year.

3. Street Cleaning:-

Gross Expenditure	\$ 49,533.46
Credit	<u>556.97</u>
Net Expenditure	\$ 48,976.49

The Gross Expenditure is made up as follows:-

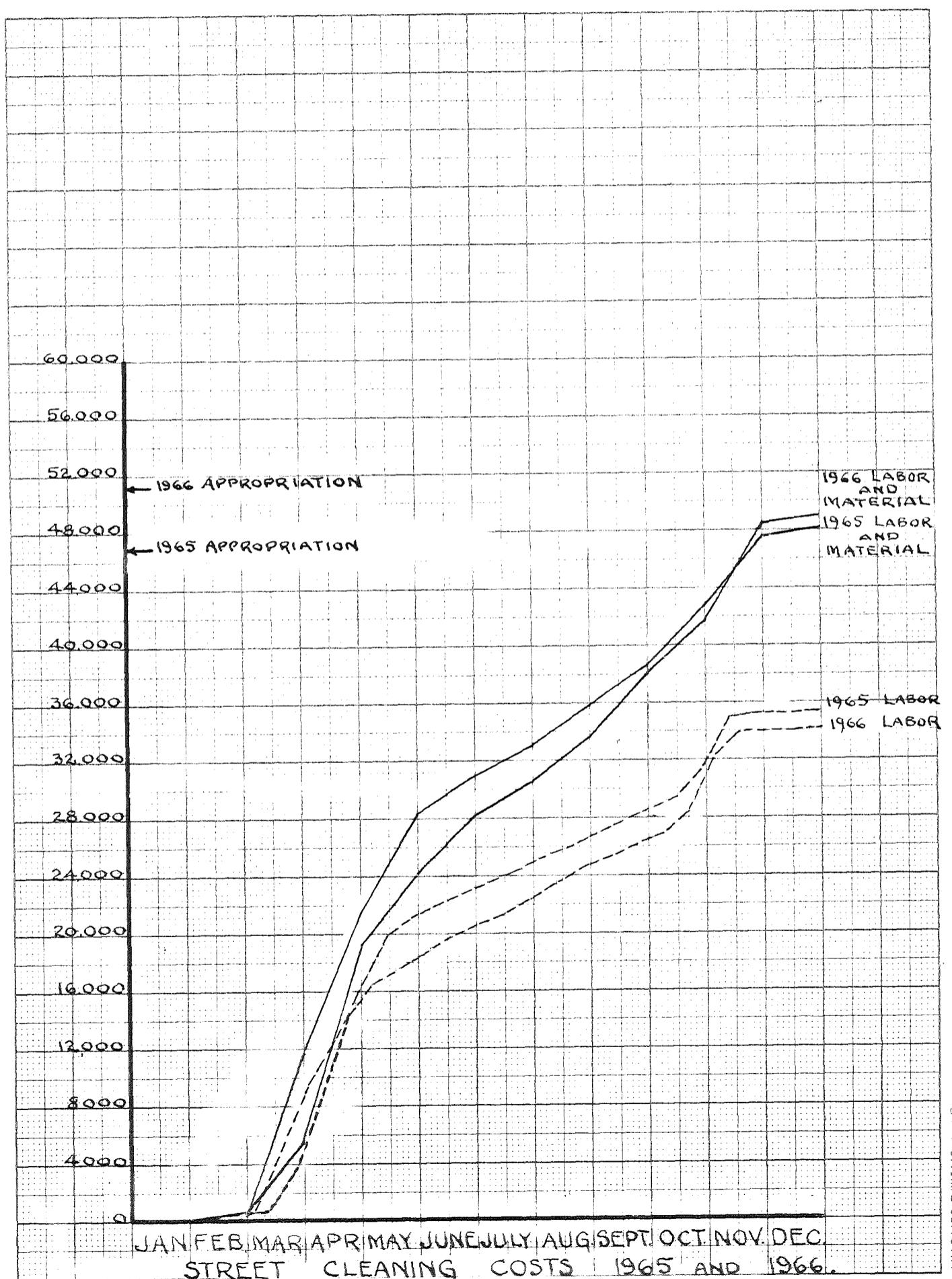
Labor	\$ 30,444.79
Hired Trucks	3,804.00
City Machinery	5,275.00
Materials	<u>10,009.67</u>
TOTAL	\$ 49,533.46

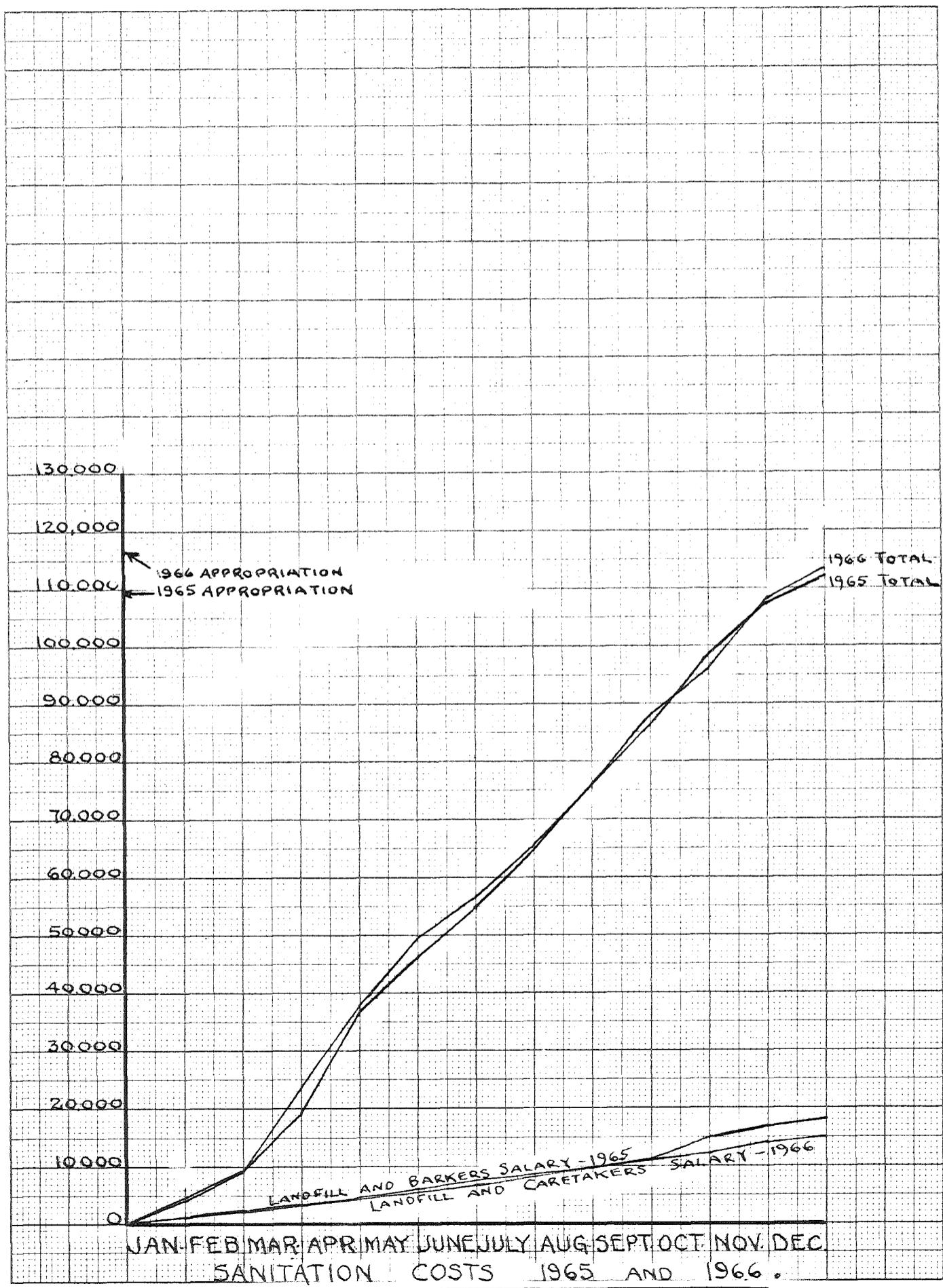
City Machinery and Material charges amounted to \$15,284.67 and is made up as follows:-

Purchase of cans, hand brooms, shovels, rakes, forks, scrapers, repairs to carts, etc.	\$ 1,538.09
Main Broom Wire	1,482.99
Gutter Broom Wire	537.10
Labor and repair charges on 1960 Elgin Sweeper	2,572.57
Labor and repair charges on Sicard Flusher	2,022.54
Purchase of Hose, Millar Motors (2 x 50' lengths 2½" Snakeskin Hose)	202.45
Sanfax (45 Gallons)	276.43
Gas and Oil:- 4,584.10 Gallons Gas ...	\$ 1,054.34
177 Quarts Oil	55.77
5 Quarts Hydraulic Oil ..	<u>4.00</u>
Journal Voucher (Antifreeze, 9 Gallons)	1,114.11
Journal Voucher (Machinery)	22.86
Journal Voucher (Varsol)	5,275.00
Journal Voucher (Cement and Brick)	2.50
Miscellaneous (Waders, car allowance, printing, rain suits, etc.)	2.46
	<u>235.57</u>
TOTAL	\$ 15,284.67

The Elgin Sweeper (purchased in 1960) worked 1,301 hours. The actual cost for cleaning streets with this machine was \$7,990.05 and was calculated as follows:-

Labor and repairs on 1960 Elgin Sweeper	\$ 2,572.57
Main Brooms	1,482.99
Gutter Broom Wire	537.10
Gasoline (1,585.40 Gallons)	364.64
Oil (46 Quarts, 5 Gallons Hydraulic)	19.18
Antifreeze (2 Quarts)	5.08
Water (442,340 Gallons)	163.70
Insurance on 1960 Street Sweeper	54.00
Labor (including Workmen's Compensation, Holiday and Pension Fund - Operator)	<u>2,790.79</u>
TOTAL	\$ 7,990.05





The operating dates for the above machine (Sweeper) were from March 24, 1966 to December 1, 1966.

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 the above mentioned machine (Flusher) were from April 5, 1966 to November 18, 1966.

The Flusher worked 1,059 hours. The actual cost for flushing streets with this machine was \$5,885.89 and was computed as follows:-

Labor and repairs to Flusher	\$ 2,022.54
Gasoline (2,998.70 Gallons)	689.70
Oil (123 Quarts)	40.59
Antifreeze (7 Quarts)	17.78
Water (4,765,500 Gallons)	848.45
Insurance on Flusher	55.00
Labor (including Workmen's Compensation, Holiday and Pension Fund - Operator) ..	<u>2,211.83</u>
TOTAL	<u>\$ 5,885.89</u>

The following is a list of machinery used in the Sanitation Department together with the repair costs, showing a comparison of costs for 1965 and 1966, including tires and tubes.

Name of Machine	Year Purchased	Repairs 1965	Repairs 1966
Elgin Street Sweeper	1960	\$ 1,469.98	\$ 2,572.57
Sicard Flusher (2250 I.G.)	1955	1,854.27	2,022.54
TOTALS		<u>\$ 3,324.25</u>	<u>\$ 4,595.11</u>

ADMINISTRATION OF JUSTICE

Expenditure\$ 1,677.92

Journal Voucher (6,978.8 Gallons Gas)	\$ 1,605.13
Journal Voucher (73 Quarts Oil)	24.09
Journal Voucher (cement, rock dust)	41.31
Journal Voucher (City machinery)	2.00
Journal Voucher (Labor)	5.39
TOTAL	<u>\$ 1,677.92</u>

LOYALIST BURIAL GROUND

On the recommendations 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 1966 the upkeep expenditure amounted to \$99.82 made up as follows:-

Labor	\$ 73.82
Hired Trucks	3.50
City Machinery	<u>22.50</u>
TOTAL	\$ 99.82

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

J. T. CLARK MEMORIAL BUILDING

Expenditure\$ 534.93

The above expenditure was for extra help required due to absence of the Caretaker (Holidays and Sickness) and the installation of water and sewer to a building now used as a paint shop by the Police Department at the rear of the J. T. Clark Library Building.

CONTINGENT

Expenditure\$ 2,021.71

The above expenditure is made up as follows:-

Labor	\$ 622.23
City Machinery	133.00
Materials	<u>1,266.48</u>
TOTAL	\$ 2,021.71

The above labor charge was for installing survey markers at various locations in the City of Fredericton, and the constructing of stands and benches

for the visit of the Governor General of Canada,
George P. Vanier, to the City of Fredericton.

The material charge of \$1,266.48 was made
up as follows:-

J. S. Neill & Son Wholesale (Masking tape, flag, rope, nails, rubber matting, paint)	\$ 74.80
H. S. Gill (Lumber)	94.77
C. W. Hall and Co. (Cardboard)	4.45
J. D. Creaghan Co. Ltd. (Bunting)	35.64
J. L. Simms and Sons (Plywood)	29.40
E. M. Young (Pulley, hooks)	1.88
Horsnell's Ltd. (Making steel brackets, pipe)	11.32
Seaboard Surveys (Surveying retarded childrens' school) ..	47.64
Seaboard Surveys (Surveying Willingdon Street)	488.00
Seaboard Surveys (Surveying - Hanwell Road land)	437.78
Journal Voucher (Sand, gravel, cement)	40.80
TOTAL	\$ 1,266.48

MUNICIPAL PARKING LOTS

Expenditure\$ 5,623.16

Included under the above heading are the
following:-

1. Municipal Parking Lot - Brunswick Street
2. Municipal Parking Lot - Campbell Street

1. Municipal Parking Lot - Brunswick Street

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 Company property).

The expenditure for the upkeep of the above
Parking Lot for 1966 as shown through the office of the
City Engineer was \$346.45 and was made up as follows:-

Labor	\$ 166.82
City machinery	174.00
Material (2½ tons of Rock Dust)	<u>5.63</u>
TOTAL	\$ 346.45

2. Municipal Parking Lot - Campbell Street

In 1966 the City Council authorized the
changing of the free parking area at the rear of the
City Hall to a paid parking area, in order to give
better parking facilities to the shopping public.

A wooden fence was erected from the Fredericton Highway Bridge, west to near Phillips and Pringle Building, and a coin activated gate was installed to control the entrance and exit of vehicles to the Parking Lot.

The 1966 expenditure for the above amounted to \$5,276.71, and was made up as follows:-

Cameron Grant Inc. (5,000 Brass tokens)	\$ 994.47
Cameron Grant Inc. (Progress payment on gates)	2,342.91
Atlantic Rentals (Rental on post hole digger)	32.96
H. S. Gill (Posts, lumber)	445.12
J. S. Neill & Son Wholesale (Roofing, nails, spikes, crayon)	10.17
Auto Machinery (Bolts for post hole digger)	2.22
Journal Voucher (Machinery)	636.00
Journal Voucher (Hired trucks)	8.00
Journal Voucher (Labor)	<u>804.86</u>
TOTAL	<u>\$ 5,276.71</u>

The above parking lot was put in operation on January 5, 1967.

MUNICIPAL HOME

Expenditure\$ 16.33

The above expenditure was for cleaning leaves from the Municipal Home Property on York Street and was made up as follows:-

Labor	\$ 7.33
Hired Truck	7.00
City Machinery	<u>2.00</u>
TOTAL	<u>\$ 16.33</u>

TOURIST and INDUSTRY

Expenditure\$ 835.26

The above expenditure was for replacement 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 near the City Limits,

together with committee advertising and the planting of tulip bulbs at various locations in the City.

The expenditure was made up as follows:-

Department of Lands and Mines (6 prints of Industrial area)	\$ 10.80
Richard's Electric (Replacement of bulbs for billboards) ..	17.07
W. R. and W. W. Thomas (56 yards of topsoil)	100.80
Capital Garden Supply (Tulip Bulbs)	390.76
Maritime Electric Co. (Light bills)	143.83
Journal Voucher (Machinery)	36.00
Journal Voucher (Labor)	<u>136.00</u>
TOTAL	<u>\$ 835.26</u>

CENTENNIAL COMMITTEE

Expenditure\$ 98.57

The above expenditure was for City Labor and Machinery for preparing for the Centennial celebration on New Year's Eve, December 31, 1966.

Labor	\$ 88.57
City Machinery	<u>10.00</u>
TOTAL	<u>\$ 98.57</u>

YORK ARENA

The expenditure under this heading amounted to \$9.00 and was for the sale of eighteen gallons of Varsol to the York Arena, Carleton Ward.

STREET LIGHTS

The City Street Lighting System on December 31, 1966 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 consists of some 18.48 miles of line and 98 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, the site of which was purchased from Willett Fruit Company 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>Transformer Load</u>	<u>Transformer Size</u>
8 - 600 C. P. Lamps @ .350 K.W. demand	2.80	
13 - 250 C. P. Lamps @ .160 K.W. demand	2.08	
16 - Fluorescent Lamps @ .50 K.W. demand	8.00	
	12.88	25 K.W.

Maryland Heights

12 - 600 C. P. Lamps @ .350 K.W. demand	4.20	
49 - 250 C. P. Lamps @ .50 K.W. demand	7.84	
	12.04	15 K.W.

SYSTEM #2 and #5

The Multiple Lighting System as of December 31, 1966 was as follows:-

255-500 Watt Incandescent Units @ \$60.00 per light per year
152-200 Watt Incandescent Units @ \$40.00 per light per year
120-400 Mercury Vapor Units @ \$90.00 per light per year
217-250 Mercury Vapor Units @ \$60.00 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, consist 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 and is maintained by the Maritime Electric Company; the City paying the Company \$60.00 per year for each 500 Watt Unit; \$40.00 per year for each 200 Watt Unit; \$90.00 per year for each 400 Mercury Vapor Lamp; \$60.00 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 which had formerly been installed in the Town of Devon and consists of 8.59 miles of line and 181 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 Irving Oil Company premises and between 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>
2 - 600 C. P. Lamps @ .350 demand	.70	
39 - 250 C. P. Lamps @ .160 demand	6.24	
15 - Fluorescent Lamps @ .50 demand	<u>7.50</u>	
	14.44	15 K.W.
<u>Carleton Ward (Central)</u>		
1 - 600 C. P. Lamps @ .350 demand	.35	
44 - 250 C. P. Lamps @ .160 demand	7.04	
12 - Fluorescent Lamps @ .50 demand	<u>6.00</u>	
	13.39	15 K.W.
<u>Carleton Ward (Down)</u>		
13 - 250 C. P. Lamps @ .160 demand	2.08	
14 - Fluorescent Lamps @ .50 demand	<u>7.00</u>	
	9.08	15 K.W.
<u>Carleton Ward (Rear)</u>		
1 - 600 C. P. Lamp @ .350 demand	.35	
19-250 C. P. Lamps @ .160 demand	3.04	*
21-Fluorescent Lamps @ .50 demand	<u>10.50</u>	
	13.89	15.K.W.

All materials such as wire, poles, pole fixtures, lamps, lamp fixtures, transformers, etc. are paid for by the City, installed by the Maritime Electric Company 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 Lighting costs for the year 1966 are as follows:-

Gross Expenditure	\$ 72,104.70
Credit	<u>21.35</u>
Net Expenditure	\$ 72,083.35
1966 Appropriation	<u>70,180.00</u>
Debit	<u>\$ 1,903.35</u>

The above credit of \$21.35 was for the amount received from the sale of old wire.

The Street Lighting expenditure of \$72,104.70 is made up as follows:-

Bulb Replacement

95 - F48T12/CW/HO Fluorescent Lamps	\$ 195.47
14 - F72T12/CW/HO Fluorescent Lamps	41.30
84 - 600 C. P. Series Lamps	87.86
336-250 C. P. Series Lamps	<u>210.12</u>
	534.75)

Power Costs for Subways and Series

Lighting December 28, 1965 to December 31, 1966 - 262,350 K.W. Hours	6,652.30)
-------------------------------------------------------------------------------	-----------

Maintenance and Contract of pole lines	541.44) Series
) Lighting

Maintenance of Lamp Fixtures, including such articles as lamp standards, lamp brackets, heads, sockets, shades, cut-outs, line switches, etc.	394.97)
-------------------------------------------------------------------------------------------------------------------------------------------------------------	---------

<u>Light Bill</u> , Fredericton Highway Bridge	631.44)
------------------------------------------------------	---------

Cenotaph, Light Bill	152.01)
----------------------------	---------

Charges on Multiple Fixtures owned and operated by the Maritime Electric Company at \$40.00, \$60.00, \$75.00 and \$90.00 per light per year	59,456.29
-------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------

Maintenance and Labor used in major repairs and new installations	3,741.50
----------------------------------------------------------------------------	----------

TOTAL \$72,104.70

Total Cost of Series System \$ 8,906.91

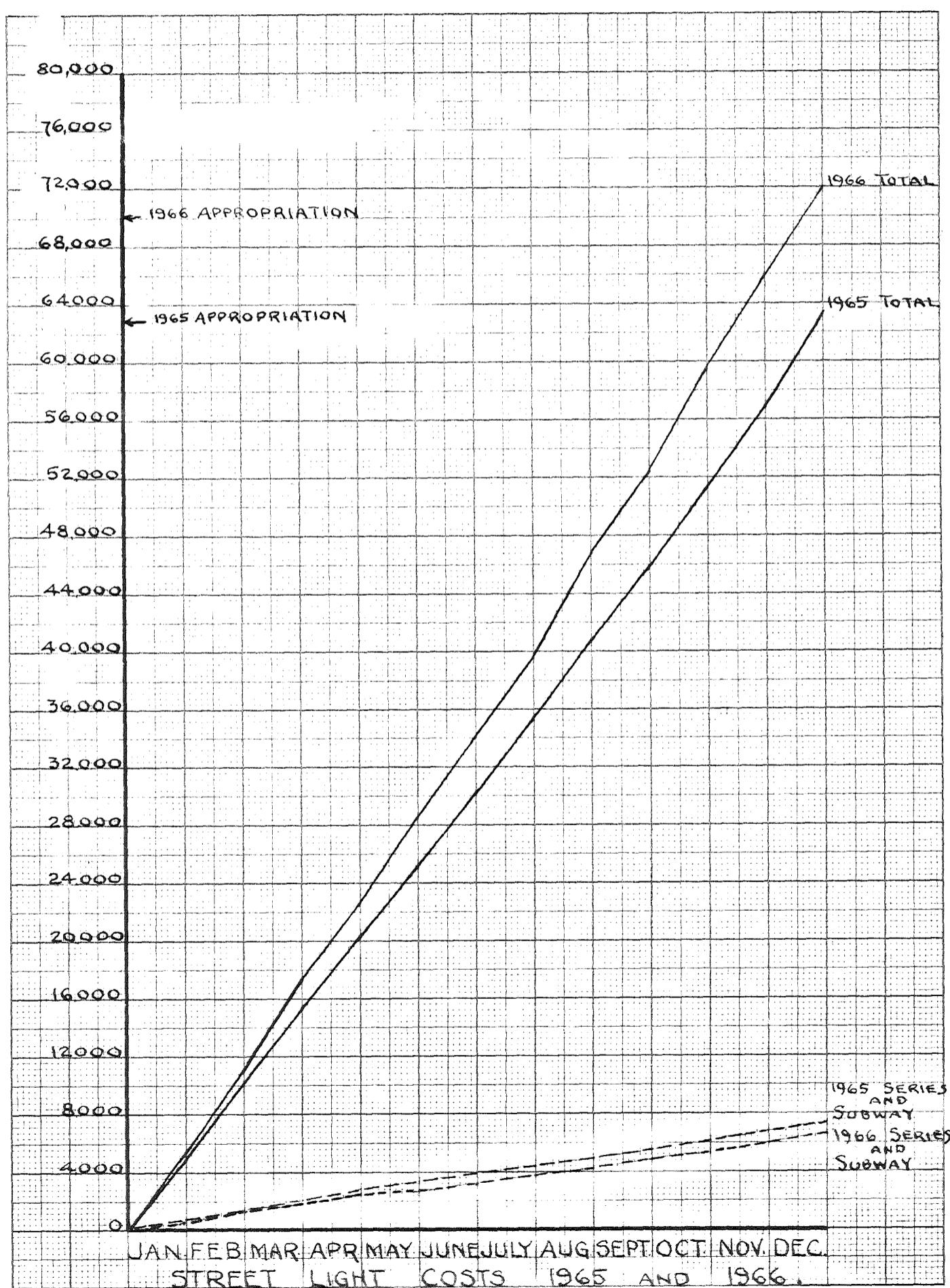
During the year 1966, various changes and extensions were made to the City of Fredericton Street Lighting System. These additions, transfers and removals are shown on a Map in the Office of the City Engineer.

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

$$\frac{72,083,35}{22,158} = \$ 3.25$$

TABLE SHOWING COMPARATIVE YEARLY COST IN
STREET LIGHTING

<u>Year</u>	<u>Total Yearly Cost</u>	<u>Yearly Appropriation</u>
1952	\$ 25,211.39	\$ 25,000.00
1953	25,487.71	27,000.00
1954	23,812.54	27,000.00
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



WATER

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

1. During 1966 the south side of the Saint John River derived its water from three Gravel Wall Wells, located in the Wilmot Park; namely, No. 1, No. 3 and No. 4.

Number 2 Well on Saunders Street cannot be used in its present state because of the prohibitive manganese content, which causes "Red" water and stains linens, etc. and is not acceptable as a Municipal Supply.

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 on standby service only, due to the marginal chemical characteristics. The Range Well has gone dry and is no longer a source of supply.

In 1964 a third Well was put in operation to correct the condition in the Carleton Ward Water Supply as explained in the 1963 annual report; namely, to insure an ample supply of water for Carleton Ward as well as trying to avoid areas that are known to contain manganese deposits.

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 into two headings:-

"Water Ordinary"

and

"Water Pumping Station"

WATER ORDINARY

This account includes all expenditures, other than Capital Expenditure for water and expenditures other than the Main Pumping Station and cost of supply from Wells. It also includes all current Water Expenditure in Carleton Ward.

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

Gross Expenditure	\$ 102,049.17
Less Credits	<u>32,269.62</u>
Net Expenditure	<u>\$ 69,779.55</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	\$ 18,462.14
University of New Brunswick (copper clamp, fire nozzle and tapping main)	64.52
Silverwood Water Co. (1 - 4" x 15" Repair Sleeve)	36.84
Mactaquac Constructors Ltd. (2 - 4" x 15" Repair Sleeves)	73.68
Maritime Engineering Ltd. (2 Copper Fittings)	3.40
Fraser Brace Ltd. (Tapping Water Main)	11.56
Mr. Charles McLenahan (Sale of 3/4" Copper Tubing) ...	100.98
Fredericton Housing Ltd. (Sale of Copper Fittings) ...	3.22
Diamond Construction (1961) Ltd. (90' of 3/4" Copper with Fittings)	49.84
Damage Claims - (Insurance on damaged hydrant)	89.49
Outpost Restaurant (2-1" Copper Couplings)	6.42
W. J. Bearisto (1 - 5/8" x 3/4" Union)	1.70
Pugh Adjustment Bureau Reg'd (Repair to damaged truck)	14.57
N. B. Telephone Co. (Flushing underground ducts)	6.00
Refund (Water Convention)	8.95
Ashfield Construction Co. Ltd. (1 - 6" x 15" Steel Clamp)	45.20
Gunter's Plumbing and Heating (1 hydrant stem extension)	5.42
Journal Voucher (Rental on Hydrants, Fire Dept.)	11,136.00
Journal Voucher (Labor)	185.04
Journal Voucher (Material)	599.65
Journal Voucher (Machinery)	165.00
Journal Voucher (Water supplied to City owned buildings, swimming and wading pools)	<u>1,200.00</u>
TOTAL	\$ 32,269.62

The Gross Expenditure is made up as follows:-

City Payroll for Hydrants	\$ 3,586.21
City Payroll for Meters	5,259.46
City Payroll for Water Ordinary	22,568.60
City Payroll for Carleton Ward Pumping Stations	1,237.76
City Payroll for Lincoln Road Pumping Station	413.11
City Payroll for Smythe Street (Booster Station)	520.93
City Payroll for Montgomery Street (Booster Station) ..	446.39
Total Payroll	\$ 34,032.46
Material and other charges	<u>68,016.71</u>
Gross Expenditure	\$ 102,049.17

No water extensions were laid under this heading in 1966. They appear under "Capital Account Water".

Sprinkler systems were installed in 1966 at the following locations:-

J. W. Bird and Company Ltd. (Industrial Park) Wilsey Road
Christ Church Cathedral, Church Street, sprinkler from
Brunswick Street.

Engine and Machine Shop, 128 Clark Street
Unipress (Industrial Park), Wilsey Road
Dominion Stores, #528 Smythe Street, sprinkler from
Dundonald Street
Research and Productivity Council, Montgomery Street

There are at present 71 Sprinkler Systems in the City. The City charge for Water supplied for Sprinkler Systems was \$25.00 per year in 1966.

Hydrants:-

There are in the City, 480 hydrants; 372 on the south side of the Saint John River and 108 on the north side.

The credit for rental charge on these hydrants appears under credits to "Water Ordinary".

Hydrants were installed at the following locations in 1966:-

<u>Location</u>	<u>Number</u>
Southampton Drive	3
Grandame Street	1
Willingdon Street	1
Stanley Street	2
Waggoner's Lane	1
Cameron Court	3
Hanwell Road	5

Meters:-

On December 31, 1966 there were 4,468 services on Meter and 393 services on Flat Rate, making a total of 4,861.

The labor cost per meter for installing, reading, repairing, etc. is \$1.18 for 1966.

210 Meters were installed in 1966.

In 1966, 21 discontinued services were dug out and shut off at the main.

All Meters are read twice a year and bills are sent out twice a year. 247 Meters are read once a month, although they are billed twice a year. These are consumers who ordinarily have large consumption and where a stopped meter or meter digit, turned over without being noticed, would mean a considerable loss of revenue to the City. All Meters on Military Buildings are included in the group of monthly meter readings.

Meters in stock, December 31, 1966:-

5/8" Meters	-	repaired and fit for service	44
1/2" Meters	-	repaired and fit for service	4
3/4" Meters	-	repaired and fit for service	1
1" Meters	-	repaired and fit for service	2
1 1/4" Meters	-	repaired and fit for service	1
		New 5/8" Meters	38
		New 1" Meters	10
		New 1 1/2" Meters	3
		New 2" Meters	4
		New 4" Meters	1

Distribution System:-

New services installed in 1966	187
Old services relayed in 1966	20
Frozen services that had to be thawed	4

The Fredericton distribution system consists of 63.53 miles of Water Main, made up as follows:-

18" Main	0.98 miles
14" Main	0.33 miles
12" Main	5.33 miles
10" Main	6.41 miles
8" Main	14.96 miles
6" Main	29.41 miles
4" Main	5.84 miles
3" Main	0.27 miles
TOTAL	<u>63.53 miles</u>

This does not include the water mains installed by the National Defence at the Exhibition Grounds, University of New Brunswick and Teachers' College, Military Depot #7, now Department of Health and Social Welfare, 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 and 0.10 miles of 15" Steel Pipe extending from the Intake Pier in the Saint John River to the Pumping Station.

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

- 1 - 4" Trident Compound, cold water meter, flanged, straight reading, Imperial Gallons, complete with companion flanges included.
- 1 - 3" Trident Compound, cold water meter, flanged, straight reading, Imperial Gallons, complete with companion flanges included.
- 6 - 2" Sealed Register, water meters, Imperial Gallons, complete with screwed connections.

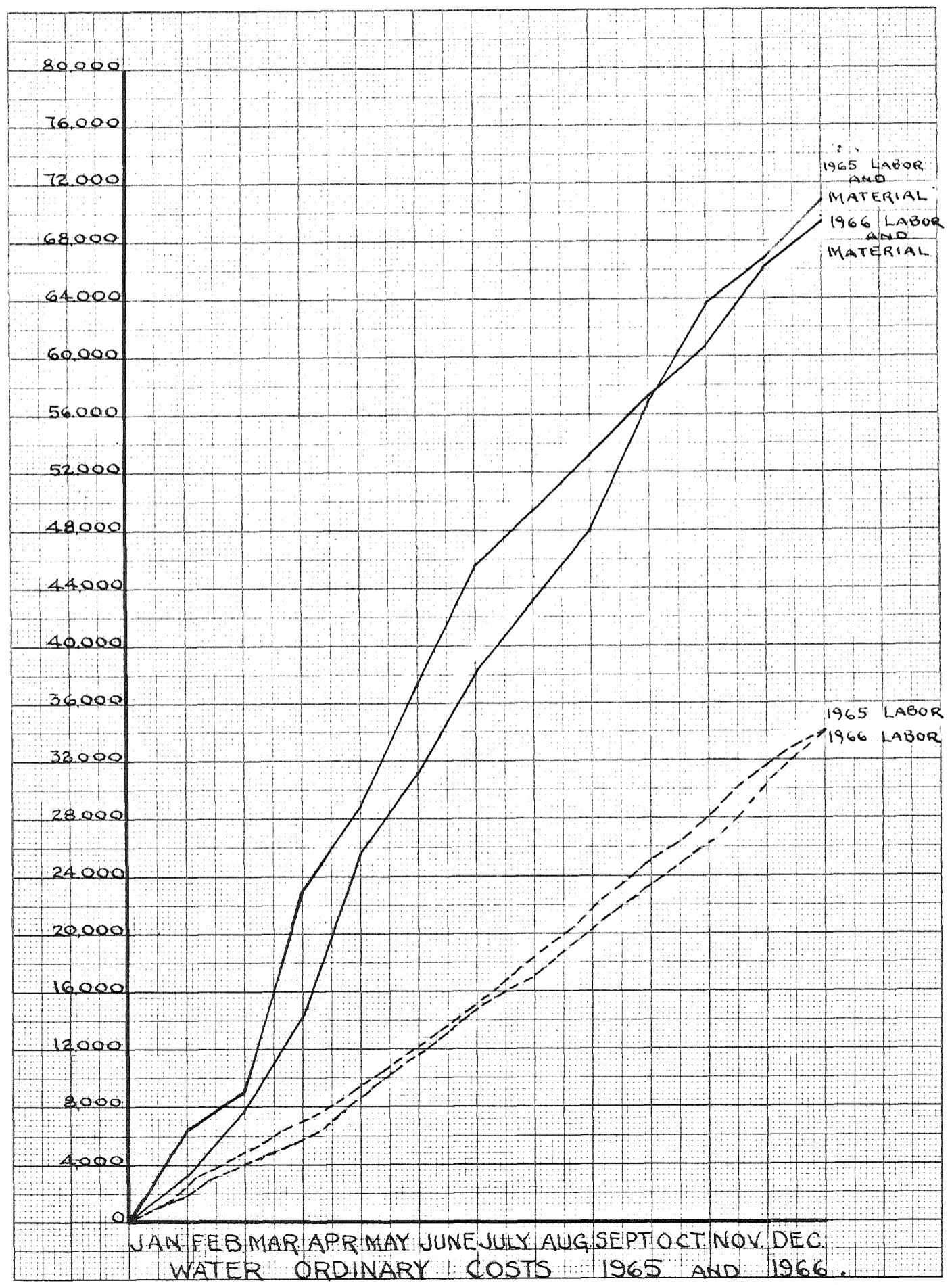
- 3 - 1½" Trident Seal Style, cold water meters, straight reading, Imperial Gallons, complete oval flanges included (Neptune Meter Ltd.).
- 6 - 1½" Sealed, cold water meters, straight reading, Imperial Gallons, complete with screwed connections. (Rockwell Manufacturing Company).
- 10 - 1" Sealed cold water meters, straight reading, Imperial Gallons, complete with screwed connections.
- 200 - 5/8" x 3/4" Trident seal frost proof, cold water meters, straight reading, Imperial Gallons, complete with couplings.

Following is the list of vehicles used and charged to "Water Ordinary" showing a comparison of repair charges for 1965 and 1966, including tires and tubes.

Name of Vehicle	Year Purchased	Repairs 1965	Repairs 1966
Chevrolet ½ ton #5	1963	\$ 715.69	\$ 203.24
Chevrolet ½ ton #2	1964	347.67	685.09
Chevrolet ½ ton (Traded 1966) #32	1959	324.25	18.66
Ford ½ ton #32	1966	<u> </u>	<u> </u> 49.64
TOTALS		<u> \$ 1,387.61 </u>	<u> \$ 956.63 </u>

The following truck was purchased this year and charged to Water Ordinary:-

1 - 1966 Ford ½ ton Pickup, Serial #F1OAC877136	\$ 2,662.00
Less allowance on 1959 Chevrolet ½ ton	<u>1,262.00</u>
	\$ 1,400.00
Tax	<u> 42.00 </u>
TOTAL	<u> \$ 1,442.00 </u>



WATER PUMPING STATION

Expenditure \$ 50,519.41

The above expenditure is divided as follows:-

City Payrolls for salaries of employees at Pumping Station	\$ 23,337.79
Work done by City employees in and around the Pumping Station	28.94
Material Charges	<u>27,152.68</u>
TOTAL	\$ 50,519.41

The material cost of \$27,152.68 is itemized
as follows:-

Item 1 Light and Power supplied by Maritime Electric Company (685,400 K.W. Hours)	\$ 12,886.31
Item 2 Light and Power supplied by Maritime Electric Company at Wells in the Park	7,298.49
Item 3 Heating (5583.1 Gallons furnace oil)	769.80
Item 4 Diesel Fuel (2,000 Gallons)	303.00
Item 5 Liquid Chlorine (1,800 lbs.)	254.50
Item 6 Oil - 3 Cases HDX #10	\$ 24.29
1 Quart HDX65	24.94
Item 7 Maintenance and repairs to buildings and equipment	2,038.18
Item 8 Supplies, packing rags, lamps, tools, etc.	242.93
Item 9 Stationary forms, charts, chemicals, ink, etc..	281.25
Item 10 Workmen's Compensation	850.00
Item 11 E. W. Hagerman (City Analyst Salary)	1,800.00
Journal Voucher (Gas, Oil and Varsol)	7.38
Journal Voucher (Cement)	2.60
Miscellaneous (Telephone, Uniforms, etc.)	<u>393.30</u>
TOTAL	\$ 27,152.68

Following is a further explanation of some of
the above items:-

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>
1957 (Heat from Victoria Public Hospital, 749.210 lbs. steam @ \$1.84 per lb.)		\$ 1,378.54	
1957	3,507.1	439.98	
1958	4,513.4	766.10	
1959	6,110.8	1,005.50	
1960	6,165.5	1,012.19	
1961	4,513.8	709.01	

<u>Year</u>	<u>Gallons Furnace Oil</u>	<u>Cost</u>
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

Item #7 - Maintenance and Repairs

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

1. Tiled Floor, Chlorinating, Sampling and Operator's Rooms.
2. Painted Walls of Chlorinating, Sampling and Operator's Rooms.
3. Painted Walls in Air Pump Room.

The Pumping Station Plant at the present time has all the Wells operating automatically on demand. 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 of 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>
1948	322,339,000	31,050.97	9.6 cents
1949	345,320,000	30,513.39	9.8 cents
1950	372,412,000	44,548.09	11.9 cents
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 Mos.)	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

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

The total water consumption for Wells in Carleton Ward for 1966 was 131,400,000 Gallons.

The total amount of Water pumped from January 1, 1966 to December 31, 1966 therefore, for the whole City, is 765,901,000 Imperial Gallons.

The total net water expenditure (operating) for the City from January 1, 1966 to December 31, 1966 is \$120,298.96.

Therefore the net cost to pump and deliver to the customer 1,000 Imperial Gallons of Water, from January 1, 1966 to December 31, 1966 is $\frac{120,298}{765,901} =$ 15.8 cents.

All the preceding costs shown under "Water Pumping Station" and "Water Ordinary" do not include the cost of billing and collecting water bills or any other overhead charges included in the City Government cost, nor do they include bond payments or sinking fund charges.

The cost of 1,000 Gallons of Water delivered, including all expenses, principal and interest, was as follows:-

Water and Sewer Revenue - 1966

<u>Revenue</u>	<u>Expenditure</u>
\$ 282,286.85	\$ 128,430.00) WATER
	17,596.08) D.S.
	<u>197,762.22</u> (Bonds)
	\$ 343,788.30

Cost of Water per thousand Gallons:-

$$\frac{343,788.30}{765,901} = 44.9 \text{ cents}$$

Principal and Interest Costs:-

$$\frac{197,762.22}{765,901} = 25.8 \text{ cents}$$

Administration and Operating Costs:-

$$\frac{146,026.08}{765,901} = 19.1 \text{ cents}$$

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

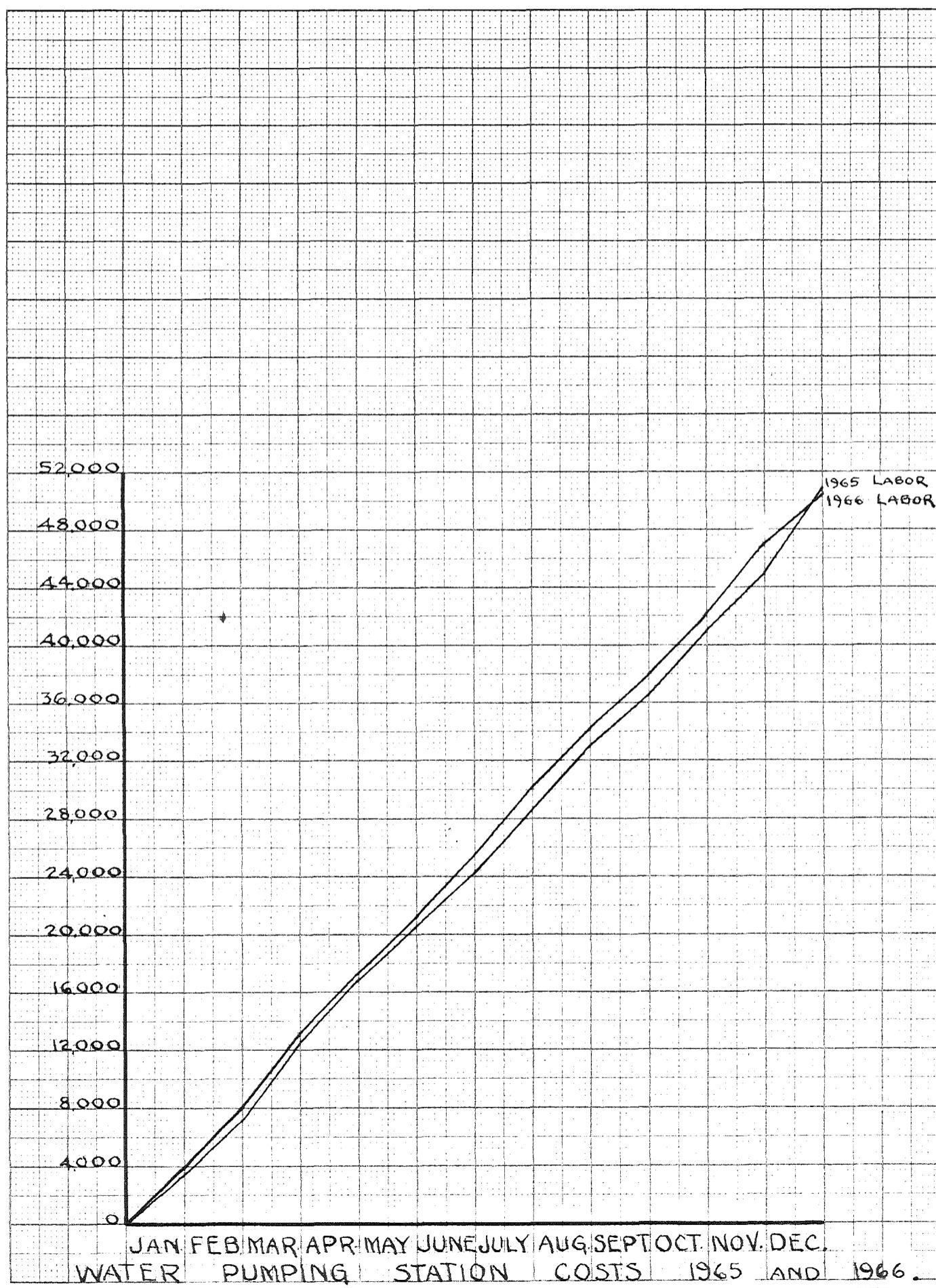
Accompanying this Report is the Report of Mr. E. W. Hagerman, City Analyst, on the Fredericton Water Supply from January 1, 1966 to December 31, 1966.

Respectfully submitted,



CITY ENGINEER.

HUGHES OWENS 404G



FREDERICTON WATER SUPPLY

Year 1966

January 1st to December 31st

Three Wells on the south and three on the north side of the Saint John River were the sources of Fredericton's excellent water supply for the year 1966.

The water is almost sterile as pumped from the Wells but a small amount of Chlorine is added so that on entering the system it shows a free chlorine residual of 0.1 to 0.15 parts per million. On the north side of the River a like amount is added at the Killarney Pump.

This small amount of Chlorine is insurance against accidental contamination by bacteria, gaining entrance to the system through broken mains, cross connections, etc. Unfortunately, this initial charge of Chlorine gradually disappears as the water gets farther away from the point of application.

New sections of pipe are sterilized locally as laid but get little or no further help from the Chlorine added at the plant. If the City continues to spread, we may eventually be obliged to establish secondary chlorinating points near the outer end of the system. Some form of portable chlorinator may be the answer to this problem. It could be invaluable, if self energized, in case of flood or other major disaster.

Water hardness is of concern to all because soap consumption rises in proportion to hardness increase. Fredericton water is moderately soft as waters are classified. The south side supply is about 90 parts per million (6 - 7 grains per gallon). On the north side of the River, the hardness may go up to 120 parts per million (8 - 9 grains per gallon). These figures vary slightly with the combination of Wells in use.

The nuisance metals present in our water supplies are iron and manganese. The former is not present in appreciable quantity but manganese is marginal and could become a problem if some unforeseen disturbance should cause infiltration from aquifers holding high manganese water.

The old (1906) filter plant has not pumped filtered water into the system since the summer of 1957, when a small quantity was used to supplement the Well supply. However, the old plant is kept in an active state and could, in an emergency, provide about one-half of the present demand of the south side of the River, but to consumers, accustomed to the high quality of our present supply, it would be most unpalatable water.

Two new Wells have been developed and tested this past summer. Both produce water of good quality. One, on Hanwell Road, is a soft water, having a hardness of 32 parts per million with no iron and only a trace of manganese. The other Well is near the river bank and about one-eighth mile above the R.C.M.P. Barracks. This water is very similar to our

present supply, about 70 parts per million of hardness and 0.4 parts per million of manganese.

There are large quantities of ground water available in the gravel beds of the Fredericton Flat, but unfortunately much of it is too rich in manganese, the element causing purple stains in laundry and brownish stains on plumbing. So far, by careful study of test holes, it has been possible to tap aquifers in which manganese is low. In the future, when the demand for water increases and its value also advances, manganese removal will be feasible. This will make the large reserves of water available, which we now avoid, because of their high manganese content.

Sampling stations for routine tests were selected in two ways. (1) Some at random and (2) some, where repeated tests show, are near strategic points in the mains.

About 64 samples were collected at 5 portions per sample equals 320 portions tested.

There were no confirmed positive portions in samples taken from City mains.

One sample from Mercal Enterprises, Hanwell Road had all 5 portions positive. This is a drilled Well outside the City Limits and used by various persons. These positive results are not counted against the City water. The Department of Health has checked the Well.

Three samples from Carleton Ward, one November 5th and two November 8th gave late fermentation (last 2 hours in 24-hour period) in Lactose Broth. The samples of the 8th were from opposite ends of town. All three failed to produce gas in the confirming media, Brilliant Green Bile, and so are not classified as Coliforms. After gas was found in the sample of the 5th, the Chlorine dose was increased at the Killarney Pump. Later samples in the same vicinity have failed to produce gas.

Attached is a condensation of United States Treasury Standards specifications for potable water as applicable to Fredericton and also a list of sampling stations.

(Signed) E. W. Hagerman,

February 8, 1967.

CITY ANALYST.

United States Treasury Standards

1. A sample is divided into 5 portions.
2. Each portion contains 10 cc. of water to be tested.
3. The confirmed test shall be used to show the presence of the Coliform group. The primary media is Lactose Broth and the confirmatory media is 2% Brilliant Green Bile.

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 3 positive portions.
3. The procedure given, using a standard sample of 5 portions, provides for an estimation of the Most Probable Number (MPN) of Coliform bacteria per 100 cc. of sample as per 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 MPN
4	1	Less than 2.2 per 100 is the MPN
3	2	Less than 5.1 per 100 is the MPN
2	3	Less than 9.2 per 100 is the MPN
1	4	Less than 16 per 100 is the MPN
0	5	More than 16 per 100 is the MPN

There were no Positive Samples in the City supply and so the MPN is less than 2.2 organisms per 100.

Following is a list of sampling points used in 1966:-

<u>Date of Sample</u>	<u>Origin of Sample</u>	<u>Positive results only will be noted ALL OTHERS are O.K.</u>
January 3	MacLaren Avenue, Fire Station	
8	Boat Club Service Station	
12	Fredericton Pony Club	
17	99 Smith Street, Carleton Ward	
23	U.N.B. Engineering Building	
28	Wandlyn Motel, Smythe Street	
February 2	MacLaren Avenue, Fire Station	
9	U.N.B. Engineering Building	
14	Greer & Lawson, Gibson Street	
22	99 Smith St., Carleton Ward	

<u>Date of Sample</u>	<u>Origin of Sample</u>	Positive results only will be noted <u>ALL OTHERS are O.K.</u>	
March 4	Bridge Street Well		
9	MacLaren Avenue, Fire Station		
15	Fredericton Pony Club		
19	99 Smith Street, Carleton Ward		
22	York Structural Steel, Wilsey Rd.		
30	U.N.B. Engineering Building		
April 5	99 Smith Street, Carleton Ward		
11	Eden Rock Motel Some growth but Non Coliform		
16	Boat Club Service Station		
21	Greer & Lawson, Gibson Street		
25	Butternut Bread, Smythe Street		
30	White Rose Service Station, Friel and Union Streets		
May 7	99 Smith Street, Carleton Ward		
10	215 Liverpool Street		
16	York Structural Steel, Wilsey Rd.		
24	U.N.B. Engineering Building		
31	White Rose Service Station, Friel and Union Streets		
June 8	Mercal Enterprises - Hanwell Rd.	5 positive	
	NOTE: - Private Well	0 negative	
8	Provincial Veterinary Lab		
13	Union Motors, Union Street		
24	Greer & Lawson, Gibson Street		
28	99 Smith St., Carleton Ward		
July 2	Rural Cemetery Extension		
6	Fredericton Boat Club		
10	Eden Rock Motel		
18	127 Charlotte Street		
21	99 Smith St., Carleton Ward		
28	York Structural Steel, Wilsey Rd.		
August 3	MacLaren Avenue Fire Station		
11	99 Smith Street, Carleton Ward		
19	City Tire, Smythe Street		
29	Rural Cemetery Extension		
Sept. 3	Exhibition Fish & Chips - Growth in media -No Coliform		
8	Chlorine Room Pumping Station		
14	MacLaren Avenue Fire Station		
19	Boat Club Service Station, Lincoln Road		
25	Greer & Lawson, Gibson Street		
Oct. 5	139 Southampton Drive		
11	Motel, Prospect Street		
20	---Stanley Street (New construction)		
25	York Structural Steel - Wilsey Rd.		
29	U.N.B. Engineering Bldg.		
Nov. 5	99 Smith St., Carleton Ward	3 Pos.	2 Neg.#
8	99 Smith St., Carleton Ward	4 Pos.	1 Neg.#
8	916 Barker Street	2 Pos.	3 Neg.#

The above three tests failed to confirm
as Positives when planted in 2% Brilliant
Green Bile Media and so are finally proved NON COLIFORM

<u>Date of Sample</u>	<u>Origin of Sample</u>	Positive results only will be noted <u>ALL OTHERS are O.K.</u>
November 14	99 Smith Street, Carleton Ward	All 5 portions NEG.
17	Union Motors, Union St.	All 5 portions NEG.
21	99 Smith Street, Carleton Ward	All 5 portions NEG.
28	MacLaren Avenue Fire Station	
December 3	U.N.B. Engineering Building	
8	Lord Beaverbrook Hotel	
17	99 Smith Street, Carleton Ward	
20	Fredericton Pony Club	
27	MacLaren Avenue Fire Station	

SPRINKLER SERVICES INSTALLED 1966.

1. DIAMOND CONSTRUCTION CO. LTD. J. W. BIRD, INDUSTRIAL PARK
2. CHRIST CHURCH CATHEDRAL, CHURCH STREET
3. UNIVERSITY PRESS OF N. B. INDUSTRIAL PARK
4. EASTWARD INDUSTRIES LTD., DOMINION STORE, SMYTHE STREET
5. ENGINE MACHINE SHOP & SUPPLIES CLARK STREET.
6. RICHARD & B. A. RYAN, R. P. C. Building, MONTGOMERY STREET

WATER SERVICES INSTALLED 1966

1.	Carl S. Hay	756 Irvine Street	$\frac{3}{4}$ " Copper
2.	Suburban Construction Co.	60 Harewood Crescent	$\frac{3}{4}$ " "
3.	Fred Gene Seto	578 Chestnut Street	$\frac{3}{4}$ " "
4.	Kenneth W. Howlett	425 Kings College Road	$\frac{3}{4}$ " "
5.	Diplomat Motel Ltd.	239 Woodstock Road	1" "
6.	Fredericton Housing Ltd.	188-192 Cambridge Crescent	$\frac{3}{4}$ " "
7.	Fredericton Housing Ltd.	130 Liverpool Street	$\frac{5}{8}$ " "
8.	Wayne Hill	55 Lorne Street	$\frac{3}{4}$ " "
9.	L. LebLanc	56 Bailey Drive	$\frac{3}{4}$ " "
10.	Valley Masonry & Plastering Ltd.	750 Irvine Street	$\frac{3}{4}$ " "
11.	Malcolm Cummings	979 York Street	$\frac{3}{4}$ " "
12.	J. A. Dixon	963 York Street	$\frac{3}{4}$ " "
13.	Suburban Construction Co.	733 Mitchell Street	$\frac{3}{4}$ " "
14.	Donald Hill	1027 York Street	$\frac{3}{4}$ " "
15.	Wendell Farris	41 Forest Acres Court	$\frac{3}{4}$ " "
16.	Fredericton Housing Ltd.	205 Norfolk Drive	$\frac{3}{4}$ " "
17.	Hill Bros. Ltd.	278 Massey Street	$\frac{3}{4}$ " "
18.	Community Racing Ltd.	Exhibition Grounds	$\frac{5}{8}$ " "
19.	Eldon Dunphy	744 Irvine Street	$\frac{3}{4}$ " "
20.	Kenneth W. Howlett	289 Kings College Road	$\frac{3}{4}$ " "
21.	Fredericton Housing Ltd.	95 Norfolk Drive	$\frac{5}{8}$ " "
22.	Gordon H. Day	199 St. Marys Street	$\frac{3}{4}$ " "
23.	Fredericton Housing Ltd.	169 Norfolk Drive	$\frac{5}{8}$ " "
24.	Highland Co.	4405 Lisgar Street	$\frac{3}{4}$ " "
25.	Fredericton Housing Ltd.	166 Norfolk Drive	$\frac{5}{8}$ " "
26.	Fredericton Housing Ltd.	151 Norfolk Drive	$\frac{5}{8}$ " "
27.	Wendell Farris	786 Jones Street	$\frac{3}{4}$ " "
28.	Wayne Hill	1059 York Street	$\frac{3}{4}$ " "
29.	J. R. Allanach	259 Lynhaven Street	1" "
30.	Donald Hill	1019 York Street	$\frac{3}{4}$ " "
31.	Terry W. Billings	1067 York Street	$\frac{3}{4}$ " "
32.	Carl S. Hay	760 Irvine Street	$\frac{3}{4}$ " "
33.	W. M. Shore	743 Irvine Street	$\frac{3}{4}$ " "
34.	Wendell Farris	139 Eglinton Street	$\frac{3}{4}$ " "
35.	Wayne Hill	1043 York Street	$\frac{3}{4}$ " "
36.	J. W. McKenzie	50 Colter Court	$\frac{3}{4}$ " "
37.	Fredericton Housing Ltd.	59 Southampton Drive	$\frac{5}{8}$ " "
38.	Hill Bros. Ltd.	50 Lorne Street	$\frac{3}{4}$ " "
39.	Hill Bros. Ltd.	278 Stanley Street	$\frac{3}{4}$ " "
40.	Fredericton Housing Ltd.	52 Southampton Drive	$\frac{5}{8}$ " "
41.	Fredericton Housing Ltd.	62 Southampton Drive	$\frac{5}{8}$ " "
42.	Fredericton Housing Ltd.	72 Southampton Drive	$\frac{5}{8}$ " "
43.	Fredericton Housing Ltd.	82 Southampton Drive	$\frac{5}{8}$ " "
44.	Fredericton Housing Ltd.	89 Southampton Drive	$\frac{5}{8}$ " "
45.	Fredericton Housing Ltd.	79 Southampton Drive	$\frac{5}{8}$ " "
46.	Fredericton Housing Ltd.	110 Liverpool Street	$\frac{5}{8}$ " "
47.	Fredericton Housing Ltd.	102 Liverpool Street	$\frac{5}{8}$ " "
48.	Hill Bros. Ltd.	252 Stanley Street	$\frac{3}{4}$ " "
49.	Paint Shop, Police Department	Carleton Street	$\frac{5}{8}$ " "
50.	Fredericton Housing Ltd.	120 Liverpool Street	$\frac{5}{8}$ " "
51.	Hill Bros. Ltd.	236 Stanley Street	$\frac{3}{4}$ " "
52.	Hill Bros. Ltd.	245 Stanley Street	$\frac{3}{4}$ " " $\frac{3}{4}$ " "
53.	Suburban Construction Co.	151 Eglinton Street	$\frac{3}{4}$ " "
54.	Suburban Construction Co.	236 Eglinton Street	$\frac{3}{4}$ " "
55.	Fredericton Housing Ltd.	135 Southampton Drive	$\frac{5}{8}$ " "
56.	Fredericton Housing Ltd.	69 Southampton Drive	$\frac{5}{8}$ " "
57.	Fredericton Housing Ltd.	115 Southampton Drive	$\frac{5}{8}$ " "
58.	Eldon R? Dunphy	76 Bailey Drive	$\frac{3}{4}$ " "
59.	Leo Brewer	751 Irvine Street	$\frac{3}{4}$ " "
60.	Delmont Little	725 Mitchell Street	$\frac{3}{4}$ " "
61.	Lyman Coy	768 Byng Street	$\frac{3}{4}$ " "
62.	Fredericton Housing Ltd.	109 Southampton Drive	$\frac{5}{8}$ " "
63.	Fredericton Housing Ltd.	196 Norfolk Drive	$\frac{5}{8}$ " "
64.	Fredericton Housing Ltd.	984 York Street	$\frac{3}{4}$ " "
65.	Highland Co.	415 Lisgar Street	$\frac{3}{4}$ " "
66.	Vernon Green	357 Montgomery Street	$\frac{3}{4}$ " "
67.	Hill Bros. Ltd.	158 Stanley Street	$\frac{3}{4}$ " "
68.	Fredericton Housing Ltd.	99 Southampton Drive	$\frac{5}{8}$ " "
69.	Hill Bros. Ltd.	255 Stanley Street	$\frac{3}{4}$ " "
70.	Dep't. of Citizenship & Immigration	28 Dedham Street	$\frac{5}{8}$ " "

71.	Dep't. of Citizenship & Immigration	56 Sappier Street	5/8" Copper
72.	Gilbert Williams	79 McNair Drive	$\frac{3}{4}$ " "
73.	Gilbert Williams	69 McNair Drive	$\frac{3}{4}$ " "
74.	Tractors & Equipment Ltd	471 Smythe Street	Supplied Own
75.	Cowan Construction Co.	14 Lorne Street	$\frac{3}{4}$ " Copper
76.	Cowan Construction Co.	34 Lorne Street	$\frac{3}{4}$ " "
77.	Cowan Construction Co.	24 Lorne Street	$\frac{3}{4}$ " "
78.	Cowan Construction Co.	42 Lorne Street	$\frac{3}{4}$ " "
79.	Cowan Construction Co.	308 Montgomery Street	$\frac{3}{4}$ " "
80.	E. B. Billings Ltd.	1039 Regent Street	$\frac{3}{4}$ " "
81.	Fredericton Housing Ltd.	102 Southampton Drive	5/8" "
82.	Fredericton Housing Ltd.	121 Southampton Drive	5/8" "
83.	Fredericton Housing Ltd.	129 Southampton Drive	5/8" "
84.	S. S. Baird & Sons Ltd.	437 Aberdeen Street	5/8" "
85.	Gilbert Williams	59 McNair Drive	$\frac{3}{4}$ " "
86.	Engine Machine Shop & Supply Ltd.	128 Clark Street	$\frac{3}{4}$ " "
87.	Hill Bros. Ltd.	228 Stanley Street	$\frac{3}{4}$ " "
88.	Hill Bros. Ltd.	260 Stanley Street	$\frac{3}{4}$ " "
89.	Suburban Construction Co.	34 Simcoe Court	$\frac{3}{4}$ " "
90.	Malcolm Cummings	356 Massey Street	$\frac{3}{4}$ " "
91.	Mrs. Dow Howland	187 Noble Street	$\frac{3}{4}$ " "
92.	Robert W. Bird	732 Irvine Street	$\frac{3}{4}$ " "
93.	Wayne Hill	209 Stanley Street	$\frac{3}{4}$ " "
94.	Fredericton Housing Ltd.	145 Southampton Drive	5/8" Copper
95.	Fredericton Housing Ltd.	36 Norfolk Drive	5/8" "
96.	Fredericton Housing Ltd.	56 Norfolk Drive	5/8" "
97.	Fredericton Housing Ltd.	211 Coventry Crescent	5/8" "
98.	Fredericton Housing Ltd.	227 Coventry Crescent	5/8" "
99.	Fredericton Housing Ltd.	331 Southampton Drive	5/8" "
100.	Fredericton Housing Ltd.	150 Southampton Drive	5/8" "
101.	Highland Co.	425 Lisgar Street	$\frac{3}{4}$ " "
102.	Topmar Housing & Construction	120 Connaught Street	$\frac{3}{4}$ " "
103.	Dep't. of Citizenship & Immigration	90 Dedham Street	5/8" "
104.	Hill Bros. Ltd.	242 Stanley Street	$\frac{3}{4}$ " "
105.	Hill Bros. Ltd.	268 Stanley Street	$\frac{3}{4}$ " "
106.	Donald Hill	179 Stanley Street	$\frac{3}{4}$ " "
107.	Hill Bros. Ltd.	218 Stanley Street	$\frac{3}{4}$ " "
108.	Gilbert Williams	81 McNair Drive	$\frac{3}{4}$ " "
109.	Gilbert Williams	91 McNair Drive	$\frac{3}{4}$ " "
110.	Gilbert Williams	101 McNair Drive	$\frac{3}{4}$ " "
111.	Gilbert Williams	90 McNair Drive	$\frac{3}{4}$ " "
112.	Myles E. Chown	235 Eglinton Drive	$\frac{3}{4}$ " "
113.	Suburban Construction Co.	225 Eglinton Street	$\frac{3}{4}$ " "
114.	Malcolm Cummings	1003 York Street	$\frac{3}{4}$ " "
115.	Wayne Hill	1051 York Street	$\frac{3}{4}$ " "
116.	Fredericton Housing Ltd.	160 Southampton Drive	5/8" "
117.	Fredericton Housing Ltd.	92 Southampton Drive	5/8" "
118.	Fredericton Housing Ltd.	165 Southampton Drive	5/8" "
119.	Fredericton Housing Ltd.	155 Southampton Drive	5/8" "
120.	A. R. Irvine	840 Irvine Street	$\frac{3}{4}$ " "
121.	James Ashfield	558 Hanwell Road	Supplied Own
122.	Fredericton Housing Ltd.	139 Coventry Crescent	5/8" Copper
123.	Fredericton Housing Ltd.	199 Coventry Crescent	5/8" "
124.	Fredericton Housing Ltd.	179 Coventry Crescent	5/8" "
125.	Fredericton Housing Ltd.	159 Coventry Crescent	5/8" "
126.	Fredericton Housing Ltd.	169 Coventry Crescent	5/8" "
127.	Edward McKinnon	738 Hanwell Road	$\frac{3}{4}$ " "
128.	Jeanne E. Somerville	725 Hanwell Road	$\frac{3}{4}$ " "
129.	Paul Crabbe	662 Hanwell Road	$\frac{3}{4}$ " "
130.	Paul Crabbe	626 Hanwell Road	$\frac{3}{4}$ " "
131.	Kurt Boehm	682 Hanwell Road	$\frac{3}{4}$ " "
132.	Mrs. Thomas Smith	597 Hanwell Road	$\frac{3}{4}$ " "
133.	Ian Saunders	520 Hanwell Road	Supplied Own
134.	Hayward E. Jewett	496 Hanwell Road	$\frac{3}{4}$ " Copper
135.	E. J. Jacobs	510 Hanwell Road	$\frac{3}{4}$ " "
136.	Highland Co.	435 Lisgar Street	$\frac{3}{4}$ " "
137.	Donald Hill	167 Stanley Street	$\frac{3}{4}$ " "
138.	Hill Bros. Ltd.	225 Stanley Street	$\frac{3}{4}$ " "
139.	Wallace E. Burlock	484 Hanwell Road	$\frac{3}{4}$ " "
140.	Stanley Mills	Wilsey Road	$\frac{3}{4}$ " "

141.	Charles Flynn	499 Hanwell Road	$\frac{3}{4}$ "	Copper
142.	William Smylie	720 Hanwell Road	$\frac{3}{4}$ "	"
143.	Ralph L. Wilson Jr.	341 Hanwell Road	$\frac{3}{4}$ "	"
144.	Gilbert Williams	111 McNair Drive	$\frac{3}{4}$ "	"
145.	Bruce S. Urquhart	2 351 Hanwell Road	$\frac{3}{4}$ "	"
146.	Gilbert Williams	100 Limerick Road	$\frac{3}{4}$ "	"
147.	Gilbert Williams	108 Limerick Road	$\frac{3}{4}$ "	"
148.	Gilbert Williams	118 Limerick Road	$\frac{3}{4}$ "	"
149.	Gilbert Williams	123 McNair Drive	$\frac{3}{4}$ "	"
150.	Fredericton Housing Ltd.	388 Canterbury Drive	$\frac{3}{4}$ "	"
151.	Fredericton Housing Ltd.	408 Canterbury Drive	$\frac{3}{4}$ "	"
152.	Fredericton Housing Ltd.	378 Canterbury Drive	$\frac{3}{4}$ "	"
153.	Fredericton Housing Ltd.	446 Canterbury Drive	$\frac{3}{4}$ "	"
154.	Fredericton Housing Ltd.	430 Canterbury Drive	$\frac{3}{4}$ "	"
155.	Fredericton Housing Ltd.	368 Canterbury Drive	$\frac{3}{4}$ "	"
156.	Fredericton Housing Ltd.	149 Coventry Crescent	$\frac{3}{4}$ "	"
157.	Ralph A. Redmond	245 Kings College Road	$\frac{3}{4}$ "	"
158.	Carl S. Hay	734 Irvine Street	$\frac{3}{4}$ "	"
159.	Wayne Hill	290 Kings College Road	$\frac{3}{4}$ "	"
160.	Hill Bros. Ltd.	125 Willingdon Street	$\frac{3}{4}$ "	"
161.	Hill Bros. Ltd.	129 Stanley Street	$\frac{3}{4}$ "	"
162.	Malcolm Cumming	159 Stanley Street	$\frac{3}{4}$ "	"
163.	R. C. Clark	468 Hanwell Road	$\frac{3}{4}$ "	"
164.	Wayne Hill	189 Stanley Street	$\frac{3}{4}$ "	"
165.	Malcolm Cummings	1030 York Street	$\frac{3}{4}$ "	"
166.	Malcolm Cummings	1022 York Street	$\frac{3}{4}$ "	"
167.	W. L. McNamara	1014 York Street	$\frac{3}{4}$ "	"
168.	Clarence Sabean	675 Gregg Street Court	$\frac{3}{4}$ "	"
169.	J. Gordon Petrie	190 Eglinton Street	$\frac{3}{4}$ "	"
170.	Suburban Construction Co.	9 Heather Terrace	$\frac{3}{4}$ "	"
171.	James H. Collyer	8 Heather Terrace	$\frac{3}{4}$ "	"
172.	Murray G. Saunders	741 Forest Hill	$\frac{3}{4}$ "	"
173.	Kenneth W. Howlett	298 Oxford Street	$\frac{3}{4}$ "	"
174.	W. A. Savage	519 Beaverbrook Court	$\frac{3}{4}$ "	"
175.	John Doherty	203 Hanwell Road	$\frac{3}{4}$ "	"
176.	Carl McMaster	383 Hanwell Road	$\frac{3}{4}$ "	"
177.	Thomas J. Hughes	273 Hanwell Road	$\frac{3}{4}$ "	"
178.	Chippins Real Estate	255 Hanwell Road	$\frac{3}{4}$ "	"
179.	Thomas J. Hughes	287 Hanwell Road	$\frac{3}{4}$ "	"
180.	Barbara Sampson	301 Hanwell Road	$\frac{3}{4}$ "	"
181.	Henry Grewenig	614 Hanwell Road	$\frac{3}{4}$ "	"
182.	Douglas Hanson	735 Irvine Street	$\frac{3}{4}$ "	"
183.	Richard & Harry Ryan	Montgomery Street	$\frac{3}{4}$ "	"
184.	C. Williamson	667 Montgomery Street	$\frac{3}{4}$ "	"
185.	Barrie Tomilson	1035 York Street	$\frac{3}{4}$ "	"
186.	Fred Beaird	949 York Street	$\frac{3}{4}$ "	"
187.	Gerald Storey	217 Hanwell Road.	$\frac{3}{4}$ "	"
	Hill Bros. Ltd.	268 Massey Street	$\frac{3}{4}$ "	"

WATER SERVICES RELAYED 1966.

1.	Winston Gourley Est.	91 Hayes Street
2.	William G. Quinn	147 Westmorland Street
3.	Llewellyn Construction Co.	201 York Street
4.	C. B. Gilks	145 Westmorland Street
5.	H. Cecil Doyle	271 Regent Street
6.	Gordon E. Saunders	139 Brunswick Street
7.	Arthur Barton	366 Northumberland Street
8.	David Kileel	301-303 Queen Street
9.	W. J. Beairsto & Co. Ltd.	829 George Street
10.	Mrs. Ella Hossack	283 St. Marys Street
11.	G. Alvah Good Est.	139-141 Carleton Street
12.	Walter Neilson	140 Argyle Street
13.	Ronald Rowe	127 Brunswick Street
14.	Mrs. Jessie Moreshead	251 York Street
15.	Mrs. Allan Carman	233 Gibson Street
16.	Simon Levine	340 King Street
17.	Dep't. of Citizenship	Block # 2, Lot # 13 Indian Reserve
18.	Jack Bilerman	59 Westmorland Street
19.	Peter Deap Est.	68-72 Bridge Street
20.	Harry A. Watson	204-208 Regent Street

DOMESTIC SEWER INSTALLATIONS 1966.

1.	Carl S. Hay	756 Irvine Street
2.	Suburban Construction Co.	60 Harewood Crescent
3.	Fred Gene Seto	578 Chestnut Street
4.	St. Marys Church Hall	Union Street
5.	Kenneth W. Howlett	425 Kings College Road
6.	Diplomat Motel Ltd.	239 Woodstock Road
7.	Fredericton Housing Ltd.	188-192 Cambridge Crescent
8.	Fredericton Housing Ltd.	130 Liverpool Street
9.	Wayne Hill	55 Lorne Street
10.	L. LeBlanc	56 Bailey Drive
11.	Valley Masonry & Plastering Ltd	750 Irvine Street
12.	Malcolm Cummings	979 York Street
13.	J. A. Dixon	963 York Street
14.	Suburban Construction Co.	733 Mitchell Street
15.	Donald Hill	1027 York Street
16.	Wendell Farris	41 Forest Acres Court
17.	Fredericton Housing Ltd.	205 Norfolk Drive
18.	Hill Bros. Ltd.	278 Massey Street
19.	Hill Bros. Ltd.	268 Massey Street
20.	Community Racing Ltd.	Exhibition Grounds
21.	Eldon Dunphy	744 Irvine Street
22.	K. W. Howlett	289 Kings College Road
23.	Fredericton Housing Ltd.	95 Norfolk Drive
24.	Gordon H. Day	199 St. Marys Street
25.	Fredericton Housing Ltd.	169 Norfolk Drive
26.	Highland Co.	405 Lisgar Street
27.	Fredericton Housing Ltd.	166 Norfolk Drive
28.	Fredericton Housing Ltd.	151 Norfolk Drive
29.	Wendell Farris	786 Jones Street
30.	Wayne Hill	1059 York Street
31.	J. R. Allanach	259 Lynhaven Street
32.	Donald Hill	1019 York Street
33.	Terry W. Billings	1067 York Street
34.	Carl Hay	760 Irvine Street
35.	W. M. Shore	743 Irvine Street
36.	Wendell Farris	139 Eglinton Street
37.	Wayne Hill	1043 York Street
38.	J. W. McKenzie	50 Colter Court
39.	Fredericton Housing Ltd.	59 Southampton Drive
40.	Hill Bros. Ltd.	50 Lorne Street
41.	Hill Bros. Ltd.	278 Stanley Street
42.	Fredericton Housing Ltd.	52 Southampton Drive
43.	Fredericton Housing Ltd.	62 Southampton Drive
44.	Fredericton Housing Ltd.	72 Southampton Drive
45.	Fredericton Housing Ltd.	82 Southampton Drive
46.	Fredericton Housing Ltd.	89 Southampton Drive
47.	Fredericton Housing Ltd.	79 Southampton Drive
48.	Fredericton Housing Ltd.	110 Liverpool Street
49.	Fredericton Housing Ltd.	102 Liverpool Street
50.	Hill Bros. Ltd.	252 Stanley Street
51.	Paint Shop, Police Dep't.	Carleton Street
52.	Fredericton Housing Ltd.	120 Liverpool Street
53.	Hill Bros. Ltd.	236 Stanley Street
54.	Hill Bros. Ltd.	245 Stanley Street
55.	Suburban Construction Co.	151 Eglinton Street
56.	Suburban Construction Co.	236 Eglinton Street
57.	Fredericton Housing Ltd.	135 Eglinton Street
58.	Fredericton Housing Ltd.	69 Southampton Drive
59.	Fredericton Housing Ltd.	115 Southampton Drive
60.	Eldon R. Dunphy	76 Bailey Drive
61.	Leo Brewer	749 751 Irvine Street
62.	Delmont Little	725 Mitchell Street
63.	Lyman Coy	768 Byng Street
64.	Fredericton Housing Ltd.	109 Southampton Drive
65.	Fredericton Housing Ltd.	196 Norfolk Drive
66.	Fredericton Housing Ltd.	984 York Street
67.	Highland Co.	415 Lisgar Street
68.	Vernon Green	357 Montgomery Street
69.	Hill Bros. Ltd.	158 Stanley Street
70.	Fredericton Housing Ltd.	99 Southampton Drive

71.	Hill Bros. Ltd.	255 Stanley Street
72.	Dep't. of Citizenship & Immigration	28 Dedham Street
73.	Dep't of Citizenship & Immigration	56 Sappier Street
74.	Gilbert Williams	79 McNair Drive
75.	Gilbert Williams	69 McNair Drive
76.	Tractors & Equipment Ltd.	471 Smythe Street
77.	Cowen Construction Co.	14 Lorne Street
78.	Cowen Construction Co.	24 Lorne Street
79.	Cowen Construction Co.	34 Lorne Street
80.	Cowen Construction Co.	42 Lorne Street
81.	Cowen Construction Co.	308 Montgomery Street
82.	E. B. Billings Ltd.	1039 Regent Street
83.	Fredericton Housing Ltd.	102 Southampton Drive
84.	Fredericton Housing Ltd.	121 Southampton Drive
85.	Fredericton Housing Ltd.	129 Southampton Drive
86.	S. S. Baird & Sons Ltd.	437 Aberdeen Street
87.	Gilbert Williams	59 McNair Drive
88.	Engine Machine Shop & Supply Ltd.	128 Clark Street
89.	Hill Bros. Ltd.	228 Stanley Street
90.	Hill Bros. Ltd.	260 Stanley Street
91.	Suburban Construction Co.	34 Simcoe Court
92.	Malcolm Cummings	356 Massey Street
93.	Mrs. Dow Howland	187 Noble Street
94.	Robert W. Bird	732 Irvine Street
95.	Wayne Hill	209 Stanley Street
96.	Fredericton Housing Ltd.	145 Southampton Drive
97.	Fredericton Housing Ltd.	36 Norfolk Drive
98.	Fredericton Housing Ltd.	56 Norfolk Drive
99.	Fredericton Housing Ltd.	211 Coventry Crescent
100.	Fredericton Housing Ltd.	227 Coventry Crescent
101.	Fredericton Housing Ltd.	331 Southampton Drive
102.	Fredericton Housing Ltd.	150 Southampton Drive
103.	Highland Co.	425 Lisgar Street
104.	Topmar Housing Construction	120 Connaught Street
105.	Dep't. of Citizenship & Immigration	90 Dedham Street
106.	Hill Bros. Ltd.	242 Stanley Street
107.	Hill Bros. Ltd.	268 Stanley Street
108.	Donald Hill	179 Stanley Street
109.	Hill Bros. Ltd.	218 Stanley Street
110.	Gilbert Williams	81 McNair Drive
111.	Gilbert Williams	91 McNair Drive
112.	Gilbert Williams	101 McNair Drive
113.	Gilbert Williams	90 McNair Drive
114.	Myles E. Chown	235 Eglinton Street
115.	Suburban Construction Co.	225 Eglinton Street
116.	Myles E. Chown	248 Eglinton Street
117.	W. J. Beairst Co. Ltd.	1160 Regent Street
118.	Malcolm Cummings	1003 York Street
119.	Wayne Hill	1061 York Street
120.	Fredericton Housing Ltd.	160 Southampton Drive
121.	Fredericton Housing Ltd.	92 Southampton Drive
122.	Fredericton Housing Ltd.	165 Southampton Drive
123.	Fredericton Housing Ltd.	155 Southampton Drive
124.	A. R. Irvine	840 Irvine Street
125.	James Ashfield	558 Hanwell Road
126.	Fredericton Housing Ltd.	139 Coventry Crescent
127.	Fredericton Housing Ltd.	199 Coventry Crescent
128.	Fredericton Housing Ltd.	179 Coventry Crescent
129.	Fredericton Housing Ltd.	159 Coventry Crescent
130.	Fredericton Housing Ltd.	169 Coventry Crescent
131.	Edward McKinnon	738 Hanwell Road
132.	Jeanne E. Somerville	725 Hanwell Road
133.	Paul Crabbe	662 Hanwell Road
134.	Paul Crabbe	626 Hanwell Road
135.	Kurt Boehm	682 Hanwell Road
136.	Mrs. Thomas Smith	597 Hanwell Road
137.	Ian Saunders	520 Hanwell Road
138.	Hayward E. Jewett	496 Hanwell Road
139.	E. J. Jacobs	510 Hanwell Road
140.	Highland Co.	435 Lisgar Street

141.	Donald Hill	167 Stanley Street
142.	Hill Bros. Ltd.	225 Stanley Street
143.	Wallace E. Burlock	484 Hanwell Road.
144.	Charles Flynn	499 Hanwell Road
145.	William Smylie	720 Hanwell Road
146.	Ralph L. Wilson Jr.	341 Hanwell Road
147.	Gilbert Williams	111 McNair Drive
148.	Bruce S. Urquhart	351 Hanwell Road
149.	Gilbert Williams	100 Limerick Drive
150.	Gilbert Williams	108 Limerick Drive
151.	Gilbert Williams	118 Limerick Drive
152.	Gilbert Williams	123 McNair Drive
153.	Fredericton Housing Ltd.	388 Canterbury Drive
154.	Fredericton Housing Ltd.	408 Canterbury Drive
155.	Fredericton Housing Ltd.	378 Canterbury Drive
156.	Fredericton Housing Ltd.	446 Canterbury Drive
157.	Fredericton Housing Ltd.	430 Canterbury Drive
158.	Fredericton Housing Ltd.	368 Canterbury Drive
159.	Fredericton Housing Ltd.	149 Coventry Crescent
160.	University Press of N. B.	Industrial Park
161.	Ralph A. Redmond	245 Kings College Road
162.	Carl S. Hay	734 Irvine Street
163.	Wayne Hill	290 Kings College Road
164.	Hill Housing Ltd.	125 Willingdon Street
165.	Hill Housing Ltd.	129 Stanley Street
166.	Malcolm Cummings	159 Stanley Street
167.	R. C. Clark	468 Hanwell Road
168.	Wayne Hill	189 Stanley Street
169.	Malcolm Cummings	1030 York Street
170.	Malcolm Cummings	1022 York Street
171.	W. L. McNamara	1014 York Street
172.	Clarence Sabean	675 Gregg Court
173.	J. Gordon Petrie	190 Eglinton Street
174.	Suburban Construction Co.	9 Heather Street Terrace
175.	James H. Collyer	8 Heather Terrace
176.	Murray G. Saunders	741 Forest Hill
177.	Kenneth W. Howlett	298 Oxford Street
178.	W. A. Savage	519 Beaverbrook Court
179.	John Doherty	203 Hanwell Road
180.	Carl McMaster	383 Hanwell Road
181.	Thomas J. Hughes	273 Hanwell Road
182.	Chippins Real Estate	255 Hanwell Road
183.	Thomas J. Hughes	287 Hanwell Road
184.	Barbara Sampson	301 Hanwell Road
185.	Henry Grewenig	614 Hanwell Road
186.	Douglas Hanson	735 Irvine Street
187.	Richard & B.A. Ryan	Montgomery Street
188.	C. Williamson	667 Montgomery Street
189.	Barrie Tomilson	1035 York Street
190.	Fred Beairstoe	949 York Street
191.	Roy Bradley	453 Waterloo Row
192.	Gerald Storey	217 Hanwell Road

WATER METERS INSTALLED 1966.

1.	MacDonald Building Supplies Ltd.	244 Kings College Road
2.	Marr Housing	64 Pembroke Crescent
3.	Wendell Farris	324 Kings College Road
4.	Fredericton Housing Ltd.	7 Bristol Street
5.	Fredericton Housing Ltd.	24 Bristol Street
6.	Fredericton Housing Ltd.	170 Liverpool Street
7.	Fredericton Housing Ltd.	175 Liverpool Street
8.	Fredericton Housing Ltd.	190 Liverpool Street
9.	Fredericton Housing Ltd.	85 Norfolk Drive
10.	Archie Colpitts	480 Mansfield Street
11.	Mrs. Noreen Valenta	872 Windsor Street
12.	Fredericton Housing Ltd.	48 Bristol Street
13.	Fredericton Housing Ltd.	146 Norfolk Drive
14.	John McKinnon	749 Prince Street
15.	Gilbert Williams	484 Pederson Crescent
16.	Fredericton Housing Ltd.	19 Bristol Street
17.	Villers Construction Co.	709 Irvine Street
18.	Villers Construction Co.	717 Irvine Street
19.	Fredericton Housing Ltd.	29 Bristol Street
20.	Mrs. Doris G. Millett	1149 Regent Street
21.	Wayne Campbell	775 Irvine Street
22.	Cummings Housing	173 Montgomery Street
23.	Cummings Housing	185 Montgomery Street
24.	Fredericton Housing Ltd.	41 Bristol Street
25.	Fredericton Housing Ltd.	51 Norfolk Drive
26.	Fredericton Housing Ltd.	51 Bristol Street
27.	Fredericton Housing Ltd.	206 Norfolk Drive
28.	Archie Colpitts	488 Mansfield Street
29.	Mussens Ltd.	1050 Kings College Hill Road
30.	Gordon L. Christensen	27 Kennedy Court
31.	Eldon Dunphy	1011 York Street
32.	Jardine Renovations	1105 Smythe Street
33.	Fredericton Housing Ltd.	106 Norfolk Drive
34.	Villers Construction Co.	721-725 Irvine Street
35.	Leo Brewer	240 Noble Street
36.	Eldon Dunphy	755 Gregg Court
37.	Fredericton Housing Ltd.	21 Norfolk Drive
38.	Fredericton Housing Ltd.	41 Norfolk Drive
39.	J. J. Melonson	753 Athlone Street
40.	Hill Bros. Ltd.	151 Beechwood Crescent
41.	Leo Brewer	247 Noble Street
42.	Construction Services Ltd.	355 Oxford Street
43.	Hill Bros. Ltd.	234 Bessborough Street
44.	Kenneth W. Howlett	75 Bailey Drive
45.	Gordon L. Christensen	747 Irvine Street
46.	Eldon Dunphy	759 Irvine Street
47.	Fredericton Housing Ltd.	76 Norfolk Drive
48.	Fredericton Housing Ltd.	86 Norfolk Drive
49.	Fredericton Housing Ltd.	126 Norfolk Drive
50.	Fredericton Housing Ltd.	136 Norfolk Drive
51.	Fredericton Housing Ltd.	156 Norfolk Drive
52.	Fredericton Housing Ltd.	186 Norfolk Drive
53.	Fredericton Housing Ltd.	155 Liverpool Street
54.	Fredericton Housing Ltd.	176 Norfolk Drive
55.	Fredericton Housing Ltd.	216 Norfolk Drive
56.	Suburban Construction Co.	274 Oxford Street
57.	C. M. Barchard	66 Bailey Drive
58.	St. Thomas College, Ladies Residence	U. N. B. Campus
59.	Fredericton Housing Ltd.	185 Liverpool Street
60.	Everett Reicker	145 Hughes Street

61. Dr. Robert Ogilvie, (Meter # 2)
62. Ernestine B. McCartney (Meter #2)
63. William G. Quinn
64. Mrs. Harry Hoben
65. Fredericton Raceway (Rest Rooms)
66. Central Mortgage & Housing
67. Mrs. Elizabeth Stephens
68. Fred Gene Seto
69. Diplomat Motel Ltd.
70. Fredericton Housing Ltd.
71. Fredericton Housing Ltd.
72. Fredericton Housing Ltd.
73. Fredericton Housing Ltd.
74. Fredericton Housing Ltd.
75. Fredericton Housing Ltd.
76. Fredericton Housing Ltd.
77. H. J. Dunbar
78. Laurie LeBlanc
79. Eldon Dunphy
80. Valley Masonry & Plastering Ltd.
81. Carl S. Hay
82. J. A. Dixon
83. Malcolm Cummings
84. Donald Hill
85. Suburban Construction Co.
86. Wayne Hill
87. Hill Bros. Ltd.
88. J. Cook
89. Terry W. Billings
90. Mrs. A. G. Turney
91. Wendell Farris
92. Highland Co.
93. Fredericton Housing Ltd.
94. Gordon Day
95. Kenneth Howlett
96. Hill Bros. Ltd.
97. Paint Shop, Police Dep't.
98. Mrs. Ella Hossack
99. John W. McMenzie
100. G. Alvah Good Est.
101. Suburban Construction Co.
102. Belmont Little
103. U. N. B. Nursing School
104. Fredericton Housing Ltd.
105. Fredericton Housing Ltd.
106. Vernon R. Green
107. Fredericton Housing Ltd.
108. W. M. Shore
109. Roubert Soulis
110. Lee Polches
111. Carl S. Hay
112. D. P. McGloin
113. Hill Bros. Ltd.
114. Hill Bros. Ltd.
115. Hill Bros. Ltd.
116. Lyman Coy
117. Wayne Hill
118. Wayne Hill
119. Highland Co.
120. S. S. Baird & Sons Ltd.
121. Miss M. George
122. Suburban Construction Co.
123. Fredericton Housing Ltd.
124. Fredericton Housing Ltd.
125. Fredericton Exhibition

575 Charlotte Street
375 St. John Street
147 Westmorland Street
111 Lansdown Street
Exhibition Grounds
735 Coombes Street
544 Union Street
578 Chestnut Street
239 Woodstock Road
130 Liverpool Street
166 Norfolk Drive
188 Cambridge Crescent
205 Norfolk Drive
95 Norfolk Drive
151 Norfolk Drive
169 Norfolk Drive
763 McLaren Avenue
56 Bailey Drive
744 Irvine Street
750 Irvine Street
756 Irvine Street
963 York Street
979 York Street
1029 York Street
60 Harewood Crescent
55 Lorne Street
278 Massey Street
786 Jones Street
1067 York Street
829 George Street
139 Eglinton Street
405 Lisgar Street
59 Southampton Drive
199 St. Marys Street
289 Kings college Road
278 Stanley Street
Carleton Street
283 St. Marys Street
50 Colter Court
139-141 Carleton Street
733 Mitchell Street
725 Mitchell Street
U. N. B. Campus
62 Southampton Drive
52 Southampton Drive
357 Montgomery Street
72 Southampton Drive
743 Irvine Street
28 Dedham Street
56 Sappier Street
760 Irvine Street
648 Phillips Street
268 Massey Street
252 Stanley Street
245 Stanley Street
768 Byng Street
1059 York Street
1043 York Street
415 Lisgar Street
437 Aberdeen Street
714 King Street
236 Eglinton Street
135 Southampton Drive
196 Norfolk Drive
Bldg. # 3, Exhibition, Handicrafts Centre.

126. Hill Bros. Ltd.
127. Fredericton Housing Ltd.
128. Gilbert Williams
129. Cowan Construction Co.
130. Cowan Construction Co.
131. Cowan Construction Co.
132. Cowan Construction Co.
133. Cowan Construction Co.
134. Leo Brewer
135. Suburban Construction Co.
136. Hill Bros. Ltd.
137. Gilbert Williams
138. Gilbert Williams
139. Fredericton Housing Ltd.
140. Fredericton Housing Ltd.
141. Fredericton Housing Ltd.
142. Donald Hill
143. Winston Gourley Est.
144. Lewis McFawn
145. Mrs. Ina Nason
146. Fredericton Housing Ltd.
147. Fredericton Housing Ltd.
148. Suburban Construction Co.
149. Kenneth W. Howlett
150. Gerald Barlow
151. Malcolm Cummings
152. Mrs. Jessie Moreshead
153. Senior Citizens Home
154. Fredericton Housing Ltd.
155. Fredericton Housing Ltd.
156. Fredericton Housing Ltd.
157. Engine Machine Shop & Supplies Ltd.
158. Henry Gilbert
159. Grace Memorial Church Parsonage
160. Edward McKinnon
161. J. R. Allanach
162. Fredericton Housing Ltd.
163. Fredericton Housing Ltd.
164. Paul H. Crabbe
165. Paul H. Crabbe
166. City of Fredericton(City Hall # 1)
167. Mrs. Dow Howland
168. Fredericton Housing Ltd.
169. City of Fredericton (City Hall # 2)
170. Jack Bileman
171. Gilbert Williams
172. Kurt Boehm
173. Diamond Construction Co.
174. Diamond Construction Co.
175. Fredericton Housing Ltd.
176. Fredericton Housing Ltd.
177. Donald Hill
178. Wayne Hill
179. Highland Co.
180. Hill Bros. Ltd.
181. A. R. Irvine
182. Robert M. Bird.
183. Malcolm Cummings
184. Stanley Mills
185. Jeanne E. Somerville

749

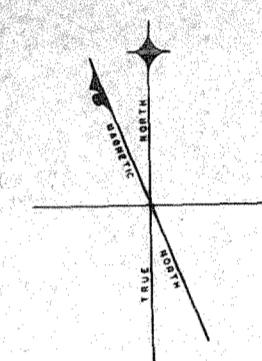
50 Lorne Street
984 York Street
69 McNair Drive
42 Lorne Street
34 Lorne Street
24 Lorne Street
14 Lorne Street
308 Montgomery Street
751 Irvine Street
151 Eglinton Street
236 Stanley Street
59 McNair Drive
79 McNair Drive
109 Southampton Drive
115 Southampton Drive
129 Southampton Drive
1019 York Street
91 Hayes Street
732 Coombes Street
374 Gibson Street
120 Liverpool Street
121 Southampton Drive
34 Simcoe Court
289 Kings College Road
90 Dedham Street
356 Massey Street
251 York Street
Waggoners Lane
99 Southampton Drive
69 Southampton Drive
82 Southampton Drive
128 Clark Street
179 Pine Street
120 Connaught Street
738 Hanwell Road
259 Lynhaven Street
145 Southampton Drive
79 Southampton Drive
662 Hanwell Road
626 Hanwell Road
Queen Street
187 Noble Street
102 Southampton Drive
Queen Street
57-59-61 Westmorland Street
91 McNair Drive
682 Hanwell Road
Barker Street
Barker Street
227 Coventry Crescent
211 Coventry Crescent
179 Stanley Street
1051 York Street
425 Lisgar Street
158 Stanley Street
840 Irvine Street
732 Irvine Street
1003 York Street
Wilsey Road
725 Hanwell Road

186.	Donald G. Barrett	146 Lincoln Road
187.	Ian Saunders	520 Hanwell Road
188.	St. Mathews Lutheran Church	1039 Regent Street
189.	Eldon Dunphy	76 Bailey Drive
190.	Hill Bros. Ltd.	228 Stanley Street
191.	Fredericton Housing Ltd.	110 Liverpool Street
192.	Fredericton Housing Ltd.	102 Liverpool Street
193.	Tractors & Equipment Ltd.	471 Smythe Street
194.	Dep't. of Citizenship	55 Sappier Street
195.	Carl S. Hay	734 Irvine Street
196.	Canadian Broadcasting Corporation	1160 Regent Street
197.	Fredericton Housing Ltd.	36 Norfolk Drive
198.	Fredericton Housing Ltd.	56 Norfolk Drive
199.	Gilbert Williams	101 McNair Drive
200.	Gilbert Williams	81 McNair Drive
201.	Wendell Farris	41 Forest Acres Court
202.	Suburban Construction Co.	225 Eglinton Street
203.	Edward Jacobs	510 Hanwell Road
204.	Clarence Sabean	675 Gregg Court
205.	Dep't. of Citizenship	140 Paul Street
206.	University of New Brunswick Annex "B"	U. N. B. Campus
207.	University of New Brunswick New Library Building	U. N. B. Campus
208.	Murray Saunders	741 Forest Hill
209.	Carl McMaster	383 Hanwell Road
210.	Highland Co.	435 Lisgar Street
211.		



THE CITY OF
FREDERICTON & VICINITY

FEET 1000



CONSTRUCTION — 1966.

NEW PAVEMENT	4.80 MILES.
NEW STREETS (GRAVEL ROAD CONSTRUCTION)	1.36 MILES.
RECAP $\frac{1}{2}$ " HOT MIX	1.37 MILES.
SEALING CITY STREETS $\frac{1}{4}$ " HOT MIX	6.29 MILES.
ARMOUR COAT $\frac{3}{8}$ " - $\frac{1}{2}$ " - $\frac{1}{4}$ " CHIPS	1.83 MILES.

REVISED TO
DEC. 31, 1966

