

ANNUAL REPORT OF THE ENGINEERING AND PUBLIC WORKS DEPARTMENT

1961



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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, 1961 to
December 31, 1961 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	5.02 miles
Concrete Sidewalk	2.03 miles
Grading and Gravelling	4.86 miles
Ditching (Outlying roads)	1.00 miles
New Streets	0.99 miles
Industrial Park (completed construction begun in 1960)	0.80 miles
10" to 72" Surface Sewer	2.83 miles
8 " to 10" Domestic Sewer	1.20 miles
4 " to 10" C. I. Water Main	1.97 miles

Contractors under contract with the Public Works
Department of the City of Fredericton in 1961 completed
construction, constructed or began construction on the following
projects:-

Ashfield Construction Co. Ltd. - To installing Domestic Sewer,
Surface Sewer and Water on
Birch Court.

Ashfield Construction Co. Ltd. - To installing Domestic Sewer,
Surface Sewer and Water at
Skyline Acres, Fredericton
Housing Ltd. development,
Forest Hill.

Everett Ferris - To installing Domestic Sewer,
Surface Sewer and Water on
Rookwood Avenue from Parkhurst
Drive to Waggoner's Lane and on
Waggoner's Lane from Rookwood
Avenue to Smythe Street.

Everett Ferris - To installing Domestic Sewer,
Surface Sewer and Water on
Windsor Street from Fenety St. ✓
to Montgomery Street and on
Valley View Street from
Hanson Street to Windsor Street.

- Everett Ferris - To constructing 6" Water Main on Hillcrest Drive, from Bridge Street towards Clark Street and on McEvoy Street from end of previously laid water main to MacLaren Avenue. ✓
- International Water Supply - Completion of 1960 contract, development of #4 Well situated in Wilmot Park.
- Weyman Construction Co. Ltd. - Construction of a building to house Pumping Equipment for #4 Well at Wilmot Park.
- York Structural Steel - Construction of a 250,000 Imperial Gallon Reservoir on Smythe Street, opposite Montgomery Street.

In addition to the above contracts, work was also done by contractors under Winter Works Programme as follows:-

- Ashfield Construction Co. Ltd. - To constructing supply line from College Hill Road to Skyline Acres.
- Everett Ferris - To constructing Surface Sewer outfall from Forest Hill to Canadian Pacific Railway Culvert, near Dunn's Crossing Road.

Under Winter Works, 50% of direct labor cost during period of construction is paid by the Federal Government.

The regular expenditures for the twelve-month period, January 1, 1961 to December 31, 1961 appear as follows:-

	<u>Net Appropriation</u>	<u>Expenditure</u>	<u>Debit</u>	<u>Credit</u>
Street Lights	46,965.00	46,835.74		129.26
Public Works	24,100.00	23,920.58		179.42
Roads and Streets	180,000.00	179,654.57		345.43
Sanitation	60,868.00	60,930.53	62.53	
Wilmot Park	6,275.00	6,255.56		19.44
Odell Park	5,654.00	4,859.24		794.76
Carleton Park	5,100.00	4,398.85		701.15
Old Burial Ground	2,650.00	2,883.82	233.82	
Street Cleaning	39,933.00	41,485.35	1,552.35	
Loyalist Burial Ground	200.00	217.94	17.94	
	271,445.00	271,442.8	786.64	2,694.6
		Net		
	<u>Revenue</u>	<u>Expenditure</u>		<u>Credit</u>
Water Pumping Station)		44,953.35)		
Water Ordinary)	224,348.44	57,718.87)	75,572.39	
Sewerage Domestic)		23,525.21)		
Salaries		22,578.62		

2169.46
1866.67
732.52

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

The preliminary report on the 1961 census shows the City's population is 19,034.

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 can be readily found by referring to the index on the preceding page.

Respectfully submitted,

W.L. Barrett.
City Engineer.

TOTAL YEARLY EXPENDITURE

The total yearly net expenditure under the direct supervision of the City Engineer in 1961 amounted to \$938,500.85. This expenditure will be taken up in detail under the various headings in this report. The total gross expenditure for 1961 amounted to \$1,112,481.74.

A graphic comparison of expenditures for Labor and Labor and Material for the year 1960 and the year 1961 is shown on the following graph.

The location of new construction completed or commenced in 1961 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.

,000,000

900,000

800,000

700,000

600,000

500,000

400,000

300,000

200,000

100,000

0

1961 LABOR AND MATERIAL

1960 LABOR AND MATERIAL

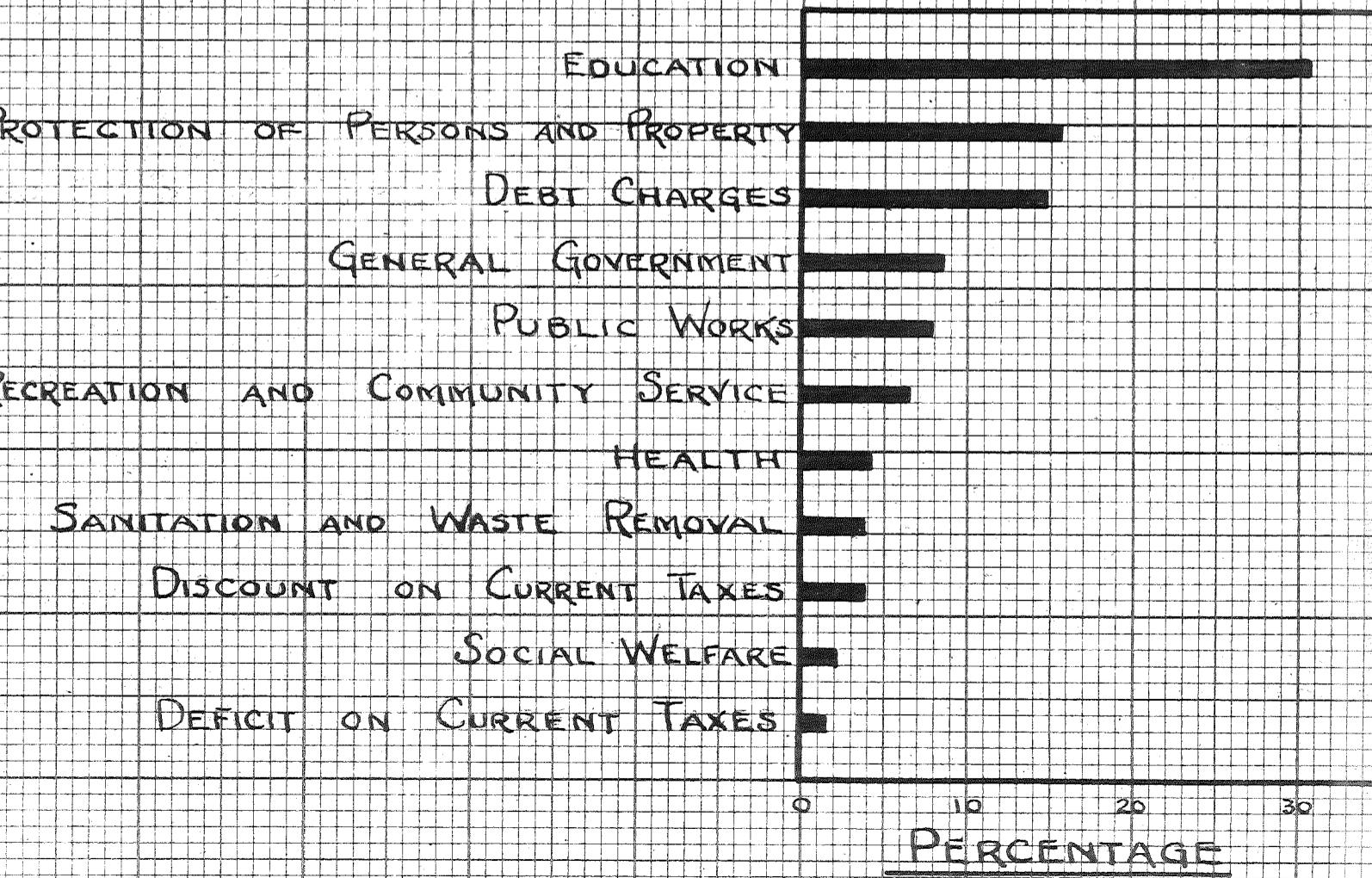
1961 LABOR

1960 LABOR

JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

TOTAL NET EXPENDITURE 1960 AND 1961.

DISTRIBUTION OF THE 1961 CITY DOLLAR



ROADS AND STREETS

In 1961 the appropriation for Roads and Streets was \$180,000.00.

There are in Fredericton some 61.93 miles of Roads and Streets; 12.05 miles being located on the north side of the St. John River and 49.88 miles on the south side. In addition there are 42.52 miles of concrete sidewalks; 7.16 miles on the north side and 35.36 miles on the south side of the St. John River.

The paved and unpaved Roads and Streets are divided between the Rural and Urban districts (Inside and Outside Tax Rate) as follows:-

<u>Roads and Streets</u>			
	<u>Urban</u>	<u>Rural</u>	<u>Total (Miles)</u>
Paved	39.55	5.45	45.00
Unpaved	7.84	9.09	16.93
TOTALS	<u>47.39</u>	<u>14.54</u>	<u>61.93</u>

Roads and Streets Expenditures - 1961

Gross Expenditure	\$ 259,021.09
Credits	<u>79,366.52</u>
Net Expenditure	179,654.57
1961 Appropriation	<u>180,000.00</u>
CREDIT	\$ <u>345.43</u>

The above Credits of \$79,366.52 are made up as follows:-

Materials or charges for Machinery to Private Parties	\$ 6,829.69
Journal Voucher (Materials sold to other departments)	2,448.04
Journal Voucher (Machinery rental on other accounts)	51,182.50
Journal Voucher (Gas, Oil, Antifreeze)	5,893.78
Journal Voucher (Holiday and Sick Leave Account)	4,235.04
Journal Voucher (Proportion of Compensation Costs) ..	480.78
Journal Voucher (Flood repairs to Phyllis Creek Bridge on Woodstock Road and Corbett Brook Culvert, Maryland Hill)	<u>8,296.69</u>
TOTAL	<u>\$79,366.52</u>

The Gross Expenditure is divided as follows:-

Labor -	Being the total of Roads and Streets Payrolls, which include the cost of hired trucks or any other machinery hired by the hour	\$ 113,826.79
Material - Charges	Which includes Workmen's Compensation, Unemployment Insurance and all materials including purchase and repairs to City owned equipment	145,194.30

The labor charges of \$113,826.79 are divided into the following items. These items give a good idea of the amount and kind of work done by the Roads and Streets Department during the year.

Item 1. <u>Snowplowing sidewalks</u> :-	42.52 miles	\$ 3,841.47
2. <u>Snow Control</u> :- Blowing, shovelling and hauling snow, plowing or scraping roads, cleaning gutters, thawing catch basins of ice and snow and any other means of snow control,	61.93 miles	41,158.27
3. <u>Sanding Streets and Walks</u> :- Storing sand in Winter Storage piles and spreading same on slippery streets and walks.....		5,818.55
4. <u>Streets</u> :- General work of maintenance of streets and sidewalks and any other items such as building culverts, curbs and gutters or pavements which are not mentioned under some particular heading.		32,384.51
5. <u>Surface Sewers</u> :- Cleaning, flushing and repairing surface sewers and building new catch basins on existing streets....		6,104.26
6. <u>Yard</u> :- Men working in Blacksmith Shop and repair work in City Yard		3,357.61
7. <u>Grading and Gravelling</u> :- Grading and application of gravel for maintenance on City Roads and Streets		105.72
8. <u>Doak Road</u> :- All work done on the Doak Road, other than work done by the Motor Grader (see Items 7 and 17, pages 10 & 15.....)		134.22
9. <u>Wilsey Road</u> :- All work done on the Wilsey Road, other than work done by the Motor Grader (See Items 7 and 17, pages 10 & 15		32.64
Forward		\$ 92,937.25

Carried Forward\$ 92,937.25

Item 10. <u>New Maryland Road</u> :-	Montgomery Street to southern city line. All work done on this road other than work done by the Motor Grader (See Items 7 and 17, pages 10 & 15)	-----
11. <u>Rural Roads</u> :-	Hanwell Road, from C.N.R. Crossing to City line, portion of Forest Hill Road from residence #812 to the end of the road, Smythe Street from Montgomery St. to Trans Canada Highway; Priestman Street; Flanagan Road and Dunn's Road. All work done on these roads other than work done by the Motor Grader, (See Items 7 and 17, pages 10 & 15)..	25.05
12. <u>Tarvia Repairs and Paving Entrances</u> :-	Patching and repairing Asphalt or Tar Pavement, applying seal coat, light tar or asphalt to pavements and applying asphalt to driveways....	9,023.69
13. <u>City Road Patrols</u> :- (Operator's Wages)	770.66	
14. <u>Parking Lots</u> :-	241.71	
15. <u>Paint Department</u> :- Painting, repairing and installing street signs on City Streets	910.59	
16. <u>Flood Repairs</u> :-	8,767.79	
17. <u>Right of Way Clearing</u> :- Doak Road and section of the Flanagan Road, Montgomery Street, College Hill Road and Forest Hill Road	1,019.75	
18. <u>Lincoln Road</u> :-	130.30	
	TOTAL	\$113,826.79

Following is a table comparing Labor Expenditure
in these items from 1958 to 1961:-

TABLE COMPARING YEARLY COSTS IN ROADS AND
STREETS LABOR ITEMS

<u>ITEM</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
1. Snowplowing sidewalks	1,340.20	1,324.35	2,520.81	3,841.47
2. Snow Control	21,490.11	22,115.72	31,282.37	41,158.27
3. Sanding Streets and Walks	9,055.78	10,657.40	8,972.51	5,818.55
4. Streets	24,424.49	34,627.86	37,255.49	32,384.51
5. Surface Sewer	4,085.76	9,985.73	4,975.35	6,104.26
6. Yard	3,876.29	3,417.00	3,729.32	3,357.61
7. Grading and Gravelling	1,298.49	1,037.11	781.31	105.72
8. Doak Road	17.12	412.34	830.47	134.22
9. Wilsey Road	75.54	877.53	7,023.35	32.64
10. New Maryland Road	1,113.52	54.82	1,531.92	----
11. Rural Roads	226.69	441.24	424.30	25.05
12. Pavement Repairs & Driveways	8,719.14	4,945.34	9,580.46	9,023.69
13. City Road Patrols	1,114.30	843.59	783.35	770.66
14. Parking Lots	8.68	89.94	12.28	241.71
15. Paint Department				910.59
16. Flood Repairs				8,767.79
17. Right of Way Clearing				1,019.75
18. Lincoln Road	_____	_____	_____	<u>130.30</u>
TOTALS	\$ <u>76,846.11</u>	<u>90,829.97</u>	<u>109,703.29</u>	<u>113,826.79</u>

Some of the above items for Labor may be better understood by the following explanations:-

ITEM 1. - 42.52 miles of sidewalk were kept plowed this year. To the labor cost of \$3,841.47 must be added \$2,191.45 (Workmen's Compensation, Pension Fund, Gas, Oil, Repairs and Depreciation) giving a total cost of \$5,790.92 or a unit cost for plowing of sidewalks of approximately \$136.00 per mile for 1961.

ITEM 2.

<u>Snow Control</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
Snowplowing Roads and Streets	4,339.59	4,078.30	6,915.24	9,489.92
Blowing, Hauling and Shovelling Snow	14,794.07	12,565.66	20,240.14	27,624.71
Catch Basins	1,502.68	3,921.80	2,079.39	3,369.45
Snow Fences	560.21	639.68	618.64	674.19
Keeping Drains on the Hills open	230.60	723.68	1,410.97	----
Thawing Culverts	62.96	186.60	17.99	----
TOTALS	\$ 21,490.11	<u>22,115.72</u>	<u>31,282.37</u>	<u>41,158.27</u>

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

The unit cost per mile of plowing and maintaining City Roads and Streets was \$1,532.00 and was calculated as follows:-

Labor (Snow Control)	\$ 41,158.27
(Sanding Roads)	5,818.55
Workmen's Compensation	1,409.31
Pension and Holiday Fund	7,046.52
City Trucks (2,835½ hours @ \$2.00 per hour)	5,671.00
City Road Patrols (1453 hours @ \$6.00 per hour)	8,718.00
Sicard Truck Plow (11 hours @ \$10.00 per hour)	110.00
City Bulldozers (374 hours @ \$6.00 per hour)	2,244.00
(453 hours @ \$4.50 per hour)	2,038.50
City Thawing Machines (530 hours @ \$2.00 per hour)	1,060.00
Front End Loader (404 hours @ \$10.00 per hour)	4,040.00
City Snow Blowers (407 hours @ \$15.00 per hour)	6,105.00
Sand (5100 tons @ 75¢ per ton)	3,825.00
Rock Salt (168.1 tons @ \$17.80 per ton)	2,992.18
1960 Ford Sand Spreader (255 hours @ \$6.00 per hour) ...	1,530.00
Michigan Shove T-6K (192 hours @ \$6.00 per hour)	1,152.00
TOTAL	<u>\$ 94,918.33</u>

Effective 1960 the Provincial Government does not require a Snow Control account for Snow Removal Grant purposes as was the custom in the past.

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

January 1, 1957 to December 31, 1957	81-3/10 inches
January 1, 1958 to December 31, 1958	111-1/4 inches
January 1, 1959 to December 31, 1959	61-1/2 inches
January 1, 1960 to December 31, 1960	88-4/10 inches
January 1, 1961 to December 31, 1961	93.89 inches

Snow Fences:- Eleven thousand feet of lath and wire snow fencing was erected under Snow Control to prevent drifting snow building up in outlying roads.

ITEM 3.

Sanding Streets and Walks:- 5,100 tons of sand was used during the winter of 1961. Cost of the Labor for sanding streets and walks during the winter was \$5,818.55.

ITEM 4.

Streets:-

Repairs to Streets (Repairs to Curbs, sidewalks, bridges, culverts, erecting of guard rails, cutting grass, constructing barricades, rip-rapping, ditching, etc.)	\$ 2,851.52
Repairs to Machinery	10,657.32
Dust Control (Unloading and spreading Calcium Chloride)	653.78
Weather Account (Holidays)	17,676.70
Sodding and Seeding	<u>545.19</u>
TOTAL	<u>\$ 32,384.51</u>

The City was reimbursed the sum of \$358.21 from the Federal Government for work carried out on sodding and seeding during the fall of 1960, under the Winter Works Incentive Programme.

In 1961, 40 tons of Calcium Chloride and 210 tons of salt were purchased for dust control and ice 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 breaks that occurred or extensions needed to the sewer outfalls.

Under this heading no extensions were made this year. The total cost of Surface Sewers amounted to \$8,933.31 which includes labor, city machinery and material.

ITEM 7.

Grading and Gravelling:-

4,262.93 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 until the tender contract for Gravel came into effect and then purchased from S. S. Baird and Sons. The contract price for gravel was as follows:-

<u>Class of Gravel</u>	<u>Price per ton delivered to the Job</u>	<u>Price per ton in Stock Pile at Pit</u>
Pit Run	\$.75	.10
Class C (3" Crushed)	1.08	.60
Class A (1½" Crushed)	1.18	.70

Hauling charges of crushed gravel by hired trucks was 45¢ per ton delivered to the job.

The total cost including labor, material and machinery for maintenance of "Gravel Roads" under the heading "Roads and Streets" amounted to \$5,968.53.

Under this heading the following roads or section of roads were gravelled:- Rookwood Avenue, Doak Road, Wilsey Road and Clark Street from Hillcrest Drive to the City line. A stock pile was also placed in the City Yard for spring frost boils and excavation repairs.

ITEM 8.

Doak Road:-

A section of the road near the Vanier Highway was ditched. This road was gravelled from the Vanier Highway in a westerly direction approximately a distance of 1,000 feet. The bushes along the right of way from the Industrial Road to the Vanier Highway were cut. The expenditure of clearing the right of way is included in the amount under "Right of Way Clearing", Item #17.

ITEM 9.

Wilsey Road:-

In 1961 a section of this road was gravelled from the Vanier Highway towards the City limits, a distance of approximately 1,200 feet, the cost of same being \$1,195.12. This amount includes labor, machinery and gravel.

The City was reimbursed the sum of \$1,249.85 from the Federal Government for work carried out on this road during the fall of 1960, under the Winter Works Incentive Programme.

ITEM 10.

New Maryland Road:-

No expenditures were made on this road this year under this heading.

The City was reimbursed the sum of \$704.74 from the Federal Government for work carried out on this road during the fall of 1960 under the Winter Works Incentive Programme.

ITEM 11.

Rural Roads:-

Under this heading Clark Street was gravelled from Hillcrest Drive to the City limits at a total cost of \$540.19 including labor, machinery and gravel.

Under this heading the City was reimbursed the sum of \$215.00 for work done in the fall of 1960 on Smythe Street (\$70.89) and on Priestman Street (\$144.11) under the Winter Works Incentive Programme.

ITEM 12.

Pavement Repairs and Driveways:-

Labor and Machinery	\$ 15,030.00
Materials	<u>13,986.79</u>
TOTAL	<u>\$ 29,016.79</u>

The labor expenditure charged to this account amounted to \$9,023.69.

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 made a big improvement in 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 Co. Limited and Forbes and Sloat Limited.

The total expenditure for Pavement Repairs and Driveways for 1961 was \$29,016.79 and was computed as follows:-

Asphalt

1710 Gallons RS1	\$ 851.10
3960 Gallons RC ₃	<u>1,648.54</u>
495 Gallons RS ₂	244.60
450 Gallons MC ₃	\$ 204.42
Less 270 Gallons MC ₃	
in stock 1961	<u>122.64</u>
	81.78
	\$ 2,826.02
45 Gallons Paving Seal	<u>95.45</u>
	2,921.47
<u>Less - Credit on Return of Drums</u>	\$ 829.00
Liquid Asphalt (sold to Diamond Const.)	<u>66.15</u>
	<u>895.15</u>
	2,026.32
<u>Plus - Freight (C.N.R.) on returned Drums</u>	65.52
Cost of Asphalt Material used in patching Streets,	
obtained from Diamond Construction Co. Ltd.	
and Forbes and Sloat	<u>7,954.95</u>
TOTAL ASPHALT COST for PATCHING STREETS	\$10,046.89

TOTAL ASPHALT COST for PATCHING STREETS	\$ 10,046.89
Kerosine (1125 Gallons)	294.75
Crushed Rock (323.51 tons)	1,014.29
Crushed Dust (325.8 tons @ \$2.10 -	\$ 684.18
<u>Less</u> 175 tons in stock, 1961 -	<u>367.50</u> ...
Gravel (598.415 tons)	678.57
Cost of Conveyor Hopper and Dryer (\$6,526.08 - Depreciation 10% of \$4,758.07).	316.68
Repairs to Plant	475.81
Maritime Electric Co. (Power)	78.54
St. John Propane Gas Company	54.00
Labor (City Employees, including Pension Fund, Workmen's Compensation and Holiday Account)	51.90
City Machinery, Trucks, Roller, Loader, Boiler, etc.	10,377.24
Miscellaneous (Materials, etc.)	5,530.50
	<u>97.62</u>
TOTAL	<u>\$ 29,016.79</u>

ITEM 13.

City Road Patrols:-

The labor expenditure (Operator's Wages) charged to this account amounted to \$770.66.

The repair charges on City Road Patrols, exclusive of City labor for the last three years were:-

<u>Date Purchased</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
1950 - Austin Western #99H	4,675.31	2,348.96	2,584.98
1953 - Champion	2,647.18	1,621.19	286.36
1955 - Allis Chalmers (AD40)	3,365.60	1,661.99	2,155.09
1961 - Gallion			366.50

ITEM 14.

Parking Lots:-

Due to the high water in the spring of 1961, the Parking Lot on Campbell Street at the rear of the City Hall and Provincial Normal School was flooded and considerable debris was deposited on the parking lot, together with pulp and logs due to pulp and log booms breaking further up river. The total cost of cleaning up after the flood amounted to \$403.71, made up of \$241.71 for labor and \$162.00 for machinery.

ITEM 15.

Paint Department:-

The labor charge amounted to \$910.59 and was for painting, repairing and erecting street signs.

ITEM 16.

Flood repairs:-

The heavy rains of May 26 and 27, 1961 caused a flash flood in the Fredericton area as well as other parts of the Province of New Brunswick.

The fill area at Phyllis Creek on the Woodstock Road was completely washed out and this traffic artery was severed. A Bailey Bridge was obtained through the Commander of Area Headquarters and traffic for local residents was restored within forty-eight hours. However, reconstruction could not be undertaken until the water level had subsided in the Saint John River.

Other washouts occurred on MacLaren Avenue at Grieves Creek, Dayton Court, Dedham Street and Route 28 at the Corbett Brook.

A breakdown in the storm sewer line on Hanson Street caused severe undermining of the paved surface, which necessitated the resurfacing of approximately 900 lineal feet of the street, after the storm sewer line was repaired.

Head walls on the Back Drain Diversion between Regent Street and York Street were undermined and required reconstruction.

Assistance for 50% of the cost of repairs to Route 2 at Phyllis Creek and Route 28 at Corbett Brook were obtained from the Provincial Government upon application for same.

Flood Repair costs were as follows:-

<u>Location</u>	<u>Net Cost of Repairs</u>
Phyllis Creek	\$ 15,279.92
Less Provincial Government. <u>7,639.96</u> 7,639.96
Route 28 - Corbett Brook	\$ 1,172.99
Less Provincial Government. <u>586.49</u> 586.50
MacLaren Avenue, Dayton Court, Hanson Street and Dedham Street	10,609.24
Back Drain Diversion	<u>2,621.68</u>
TOTAL COST OF FLOOD REPAIRS TO THE CITY OF FREDERICTON	\$ <u>21,457.38</u>
GROSS COST of FLOOD REPAIRS	\$ 29,683.83

ITEM 17.

Right of Way Clearing:-

Under this heading, Right of Way widening was carried out on the following:-

1. Doak Road
2. A section of the Flanagan Road from Doak Road westerly
3. Montgomery Street, Regent Street to College Hill Road
4. College Hill Road, Montgomery Street to Provincial Garage
5. Forest Hill Road, Fred Boone's residence #800 Forest Hill Road to Vanier Highway

The labor charge for the above work amounted to \$1,019.75.

This work was done under the Winter Works Incentive Programme and 50% of the casual labor charge will be paid by the Federal Government.

ITEM 18.

Lincoln Road:-

A ditch was dug on the Lincoln Road near the junction of the Lincoln Road and Vanier Highway at a cost of \$200.30. The labor charge amounted to \$130.30 and the machinery cost was \$70.00.

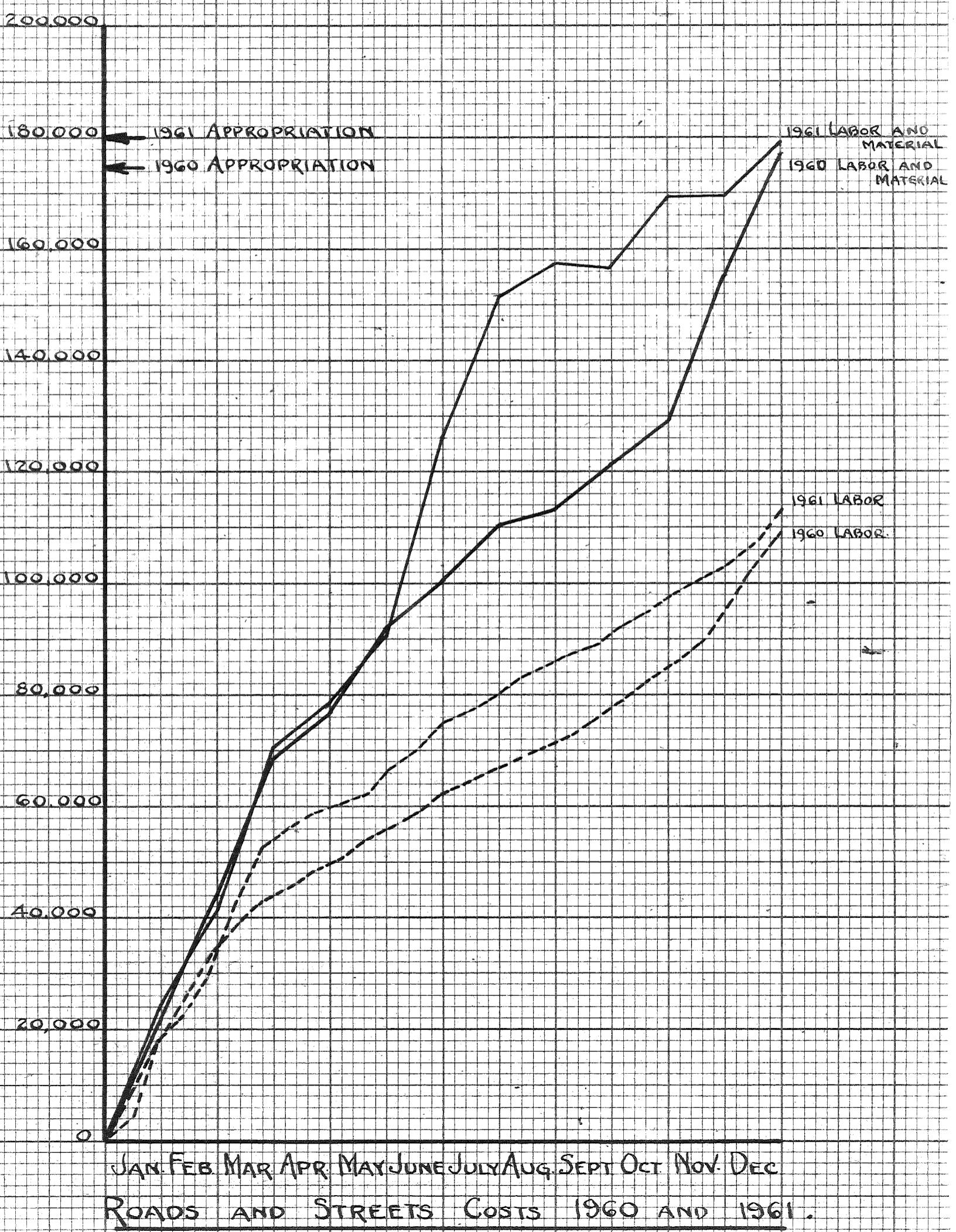
The following items of machinery were purchased this year and charged to Roads and Streets:-

1 - Case Diesel Crawler Tractor Grp. E1 Serial #3017153, Hydraulic Angle - Doze, Serial #4057814, Case Engine Model 613 to 6433 Delco Generator Serial #1100404 - OM2, Starter Delco Serial #1108670 IC 9 Reg. - 1119-279D	\$ 6,673.00
12 VPLB	\$ 6,673.00
<u>Less</u> Trade in Caterpillar D2-1953	<u>2,538.19</u>
	<u>4,134.81</u>
Provincial Sales Tax 3% on \$6673.00	<u>200.19</u>
Net Cost	\$ 4,335.00
1 - Used Snow Blower - 1952 Model	\$ 6,500.00
<u>Less</u> - Allowance	<u>1,700.00</u>
	<u>4,800.00</u>
<u>Plus</u> - 3% Provincial Sales Tax on \$6500	<u>195.00</u>
Net Cost	\$ 4,995.00
Forward	\$ 9,330.00

	Carried Forward	\$ 9,330.00
1 - Willys 1961 CJS $\frac{1}{2}$ Metal Cab, Serial No.		
5748 - 126534, Motor No. 4J-281238,		
Heater Defroster, Directional Signals,		
Draw Bar, Antifreeze, 5 Snow and Mud		
tires, passenger seat, ST-72E Snow Plow,		
Curb Idle Generator No. D	\$ 3,531.00	
<u>Less</u> - Trade in 1958 Willys Jeep	<u>881.00</u>	
	2,650.00	
<u>Plus</u> - 3% Provincial Sales Tax	<u>79.50</u>	
	Net Cost	2,729.50
1 - 1961 International Model B 160, Serial		
No. CW11806E8, Motor No. 2901 C, Front		
shock absorbers, Directional Signals		
front and rear, 4 Speed Transmission,		
2 Speed Differential, Heavy Duty		
Springs, Undercoated, Power Take-Off,		
Body installed - 7-825 x 20 - 10 Ply		
Tires and Tubes	\$ 5,074.20	
<u>Less</u> - Trade in allowance on 1957 3 Ton		
Chev.	<u>850.00</u>	
	4,224.20	
<u>Plus</u> - 3% Provincial Sales Tax	<u>126.72</u>	
	Net Cost	4,350.92
1 - Model 118 Galion Motor Grader, Serial		
No. 118H02485, Motor No. VD554-974-G98A,		
equipped with Snow Wing and Controls,		
complete	26,687.00	
<u>Less</u> - Trade in allowance on Champion		
Motor Grader	<u>9,500.00</u>	
	17,187.00	
<u>Plus</u> - 3% Provincial Sales Tax on		
\$26,687.00	<u>800.61</u>	
	Net Cost	<u>17,987.61</u>
	TOTAL	<u>\$34,398.03</u>

Following is the list of vehicles and machinery used and charged for 1960 and 1961, including tires and tubes.

<u>Name of Vehicle</u>	<u>Year Purchased</u>	<u>Repairs 1960</u>	<u>Repairs 1961</u>
Austin Western Grader #99H	1950	2,756.73	2,825.78
Champion Grader (Traded in 1961)	1953	1,835.25	329.40
Allis Chalmers Grader AD-40	1955	2,047.73	2,418.89
Galion	1961	----	384.37
Caterpillar D-6 Bulldozer	1953	2,211.61	2,333.02
Caterpillar D-2 Bulldozer (Traded in 1961)	1954	2,356.70	314.74
Caterpillar D-2 Bulldozer	1957	1,375.60	929.56
Case 420 Crawler Tractor	1961	----	84.74
Michigan T6K Shovel (3/8 Yard) Unit Shovel	1947 1957	2,865.47 2,758.06	2,961.82 3,369.49
Sicard Snow Blower Jr. #1	1949	1,879.91	1,140.88
Sicard Snow Blower Jr. #2	1961	----	1,739.30
Ford Sand Spreader	1960	186.08	584.44
Willys Jeep #12	1959	225.55	290.09
Willys Jeep #11 (Traded in 1961)	1958	407.26	89.73
Willys Jeep #17	1960	59.64	268.44
Willys Jeep #11	1961	----	65.80
Chevrolet 3 Ton (Dump Truck)	1960	67.90	196.91
Chevrolet 3 Ton (Dump Truck) (Traded in 1961)	1957	733.25	36.43
G.M.C. 1 Ton Pick-Up	1960	76.56	759.42
Chevrolet $\frac{1}{2}$ Ton Panel	1957	322.31	296.82
G.M.C. 3 Ton	1958	440.28	176.32
Ford 3 Ton (Dump Truck)	1959	248.97	200.15
International 1 Ton	1959	113.66	131.95
International 3 Ton Dump Truck	1961	----	167.64
Ford Fairlane (2 Door)	1960	12.89	459.52
Arpic Compressor	1953	209.15	56.85
Ingersol Rand Compressor	1957	496.64	114.74
Pettibone Mulliken Loader	1958	1,581.32	3,855.47
Tarvia Roller Model #157	1955	132.47	169.75



WINTER WORKS PROGRAMME

The City of Fredericton took advantage of assistance offered under the Winter Works Programme in 1961, wherever it was possible to qualify for the assistance offered.

Assistance was obtained on many projects which were part of the Capital Works Programme for the year and which were commenced or were in progress during the period when assistance is available, namely, October 15th to May 31st.

The following is a list of projects on which assistance was obtained and the credits for same appear in the appropriate accounts or will be credited in 1962 when claims are finalized.

<u>Project Description</u>	<u>Total Direct Payroll Cost</u>	<u>Amount Claimed</u>	<u>Net Labor Cost to City of F'ton.</u>
1. Industrial Area Clearing	8,185.06	4,072.55	4,112.51
2. Reservoir Site Clearing	160.06	60.98	99.08
3. Curb & Gutter - Wilmot Park & St. Marys Street	763.85	206.50	557.35
4. Water Supply Line to Forest Hill	3,475.50	1,737.75	1,737.75
5. Curb & Gutter - Boulevard Landscaping, Topsoil, etc.	2,103.67	1,051.83	1,051.84
6. Concrete Walk Const.	1,457.20	728.60	728.60
7. Curb & Gutter Const.	2,978.78	1,489.39	1,489.39
8. Carleton Park Development	424.87	212.43	212.44
9. Odell Park Development	435.63	217.81	217.82
10. Gravel Road Construction (Mack Road)	345.85	172.92	172.93
11. Grieves Creek Reclamation (Clark & Union)	724.52	362.26	362.26
12. Guard Rail Construction (Industrial Area)	482.51	241.25	241.26
13. Storm Sewer Outfall - Forest Hill	4,006.63	2,003.31	2,003.32
14. Clearing Right of Way, Doak Road, Forest Hill, Montgomery Street, College Hill Road	918.01	353.49	564.52
15. Constructing Water Line to Reservoir (Incomplete)			
TOTALS	\$ 26,462.14	12,911.07	13,551.07

CAPITAL ACCOUNT CURB and GUTTER

The Net Expenditure under this heading amounted to \$41,040.98.

For the above expenditure of \$41,040.98, concrete curbs and gutters were constructed at the following locations:-

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

All the concrete poured was purchased ready-mixed on the job from the firm of Elmtree Concrete Ltd. at a price of \$14.50 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 26,211 lineal feet into the total cost of \$41,040.98 is \$1.57 per lineal foot.

CAPITAL ACCOUNT SEWER DOMESTIC

Gross Expenditure & stocked material	\$ 37,628.08
Less - Inventory, Dec. 31, 1961	<u>1,526.95</u>
	<u>36,101.13</u>
Credits	<u>7,822.63</u>
Net Expenditure	<u>\$ 28,278.50</u>

The above Credits are made up as follows:-

Capital Winter Club (Relocating Domestic Sewer line on Rookwood Avenue)	\$ 474.69
Atlas Construction Co. Ltd. (Relocating Domestic Sewer line at Exhibition Grounds)	504.36
Matthews Plumbing & Heating (Sale 1 Manhole Cover and Frame)	40.17
Hagerman's Plumbing & Heating Ltd. (Sale 40' - 8" T. C. Pipe)	35.60
Charles Llewellyn (Sale of 4 Manhole Covers and Frames)	160.68
Diamond Construction Co. Ltd. (Installing Sewer at Sobey's - Beaverbrook Court)	115.36
Indian Affairs Branch (Installing Sewers to houses at Indian Reserve)	899.58
Fredericton Tire Ltd. (Sale of 1 Manhole Cover and Frame)	40.17
Board of School Trustees (Sale of 1 Manhole Cover and Frame)	40.17
Journal Voucher (Materials paid for by Capital Account Sewer and used by other City Departments)	2,408.99
Journal Voucher (Entries in Error)	<u>3,102.86</u>
 TOTAL	 <u>\$ 7,822.63</u>

Domestic Sewers were laid at the following
locations:-

<u>Location</u>	<u>Lineal Feet</u>
	<u>8" T.C.</u> <u>8" Transite</u> <u>10" Concrete</u>
Birch Court	424
Fredericton Housing Sub- Division (Forest Hill)	2,602
Forest Acres Court	100
Indian Reserve	220
Rookwood Avenue	229
South Devon School Grounds (Swimming Pool)	417
Valley View Street	551
Waggoner's Lane, Rookwood Avenue to Birch Court	1197
Windsor St., Fenety Street to Montgomery Street	<u>625</u>
 TOTALS	 <u>331⁴</u> <u>2,822</u> <u>229</u>

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

<u>Location</u>	<u>Labor and Machinery</u>	<u>Material</u>	<u>Total</u>
Birch Court	\$ 958.08	522.03	1,480.11
F'ton. Housing Subdivision (Forest Hill)	9,280.86	4,904.52	14,185.38
Forest Acres Court	393.42	256.13	649.55
Indian Reserve	347.19	552.39	899.58
Rookwood Avenue	387.23	322.80	710.03
South Devon School Grounds	170.00	394.62	564.62
Valley View Street.....	1,668.41	778.64	2,447.05
Waggoner's Lane	2,940.83	1,518.50	4,459.33
Windsor Street	<u>2,108.71</u>	<u>1,066.17</u>	<u>3,174.88</u>
TOTALS	<u>\$ 18,254.73</u>	<u>10,315.80</u>	<u>28,570.53</u>

All above costs include any holdback payments, which will appear in 1962 accounts.

Included in the net expenditure of \$28,278.50 is the amount of \$4,339.33 holdback from jobs completed in 1960 and showing in 1961 accounts.

Total lineal feet laid, 6,365, at an average cost per lineal foot of \$4.49.

Material in stock, December 31, 1961:-

58 lineal feet of 12" T. C. Pipe @ \$1.55 per foot	\$ 89.90
437 lineal feet of 8" T. C. Pipe @ \$.86 per foot	375.82
342 lineal feet of 8" Asbestos Cement Pipe @ \$1.53	523.26
12 manholes (covers and frames) @ \$40.17 complete	482.04
47 lineal feet of 10" T. C. Pipe @ \$1.19 per foot	<u>55.93</u>
TOTAL	<u>\$1,526.95</u>

CAPITAL ACCOUNT SURFACE SEWER

Gross Expenditure and Stocked Material,	
less present stock	\$ 106,389.75
Credits	<u>8,362.54</u>
Net Expenditure	\$ <u>98,027.21</u>

The above credits are made up as follows:-

Work done and materials sold to private parties	\$ 1,091.81
Journal Voucher (Materials paid for by Capital Account Surface Sewer and used by other City Departments)	<u>7,270.73</u>
TOTAL	<u>\$ 8,362.54</u>

Under this heading Surface Sewers were laid at the following locations:-

LOCATION	CONCRETE PIPE							CORRUGATED PIPE		
	10"	12"	15"	18"	24"	30"	36"	18"	24"	30"
Birch Court	60	408								
Back Drain Diversion	36									
Campbell Street										
Dayton Court										
F'ton. Boat Club										
Forest Hill	90	197	170	208						
F'ton. Housing Subdivision	306	1501	413							
F'ton. High School	99									
Forest Hill (Outfall)										
Gibson St. (Offtake)	81									
Green Road (Offtake)										
Montgomery Street	297	1182	36	1340	20					
Neill Street	90	775								
Rookwood Avenue	119		555							
St. Marys Street		48								
Valley View St.	244	39		4	295					
Waggoner's Lane	88	80	1018							
Windsor Street	136	639								
TOTALS	1646	4977	2192	1566	1690	1338	748	20	30	180

Total lineal footage all sizes - 14,387 feet.

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

<u>Location</u>	<u>Labor and Machinery</u>	<u>Material</u>	<u>Total</u>
Birch Court	1,136.26	868.61	2,004.87
Back Drain Diversion....	597.10	1,435.88	2,032.98
Campbell Street	1,180.03	1,932.46	3,112.49
Dayton Court	373.79	1,357.69	1,731.48
F'ton. Boat Club	218.65	563.63	782.28
Forest Hill	4,645.80	4,208.03	8,853.83
F'ton. Housing	12,097.38	7,911.04	20,008.42
Subdivision			
Forest Hill (Outfall)...	14,011.13	13,082.14	27,093.27
Gibson St. (Offtake)....	184.75	204.44	389.19
Montgomery Street	6,379.63	6,582.83	12,962.46
Neill Street	1,284.07	1,423.43	2,707.50
Rookwood Avenue	1,743.21	1,610.85	3,354.06
Valley View Street	1,892.07	2,418.07	4,310.14
Waggoner's Lane	2,864.41	2,895.51	5,759.92
Windsor Street	2,640.83	1,551.74	4,192.57
TOTALS	\$ 51,249.11	48,046.35	99,295.46

All above costs include any holdbacks on 1961 work which will appear in 1962 accounts.

The following is the average cost for laying the various sizes of pipe in place, including Catch Basins:-

36" Concrete Pipe	\$ 18.72 per lineal foot (Rock)
30" Concrete Pipe	11.31 - 15.67 per lineal foot
24" Concrete Pipe	9.23 - 10.50 per lineal foot
18" Concrete Pipe	5.77 - 7.25 per lineal foot
15" Concrete Pipe	4.94 - 6.64 per lineal foot
12" Concrete Pipe	4.45 - 5.43 per lineal foot
10" Concrete Pipe	4.39 - 5.27 per lineal foot

Stock on hand, December 31, 1961:-

8 feet of 18" Concrete Pipe @ \$ 1.95 per foot	\$ 15.60
64 feet of 24" Concrete Pipe @ \$ 4.96 per foot	317.44
104 feet of 30" Concrete Pipe @ \$ 5.62 per foot	584.48
84 feet of 36" Concrete Pipe @ \$ 8.67 per foot	728.28
4 feet of 42" Concrete Pipe @ \$10.04 per foot	40.16
32 feet of 48" Concrete Pipe @ \$15.40 per foot	492.80
160 feet of 48" Corrugated Pipe @ \$13.01 per foot	2,081.60
10 Bags Portland Cement @ \$1.15 per bag	11.50
Catch Basins, 10 Gratings and Covers @ \$42.21 complete	422.10
TOTAL	\$ 4,693.96

CAPITAL ACCOUNT WATER

Gross Expenditure and stocked material	\$ 183,139.08
Less Inventory, Dec. 31, 1961	<u>28,039.20</u>
	\$ 155,099.88
Credits	<u>29,119.71</u>
Net Expenditure	<u>\$ 125,980.17</u>

The above credits are made up as follows:-

F'ton. Housing Ltd. (32'-6" C.I.M.J. Pipe @ \$2.53 per foot)	\$ 80.96
Horsnell's Ltd. (2'-6" C.I.Pipe @ \$2.53 per foot)	5.06
Diamond Construction Co. Ltd. (Installing Surface Sewer, Medical Clinic)	7.00
Fredericton Tire Ltd. (Installing 6" Sprinkler System, Scully Street)	415.32
Diamond Construction Co. Ltd. (Installing Water at Medical Clinic)	374.89
University of New Brunswick (4'-6" C. I. Pipe)	9.68
Atlas Construction Co. Ltd. (Relocating Water at Exhibition Grounds)	1,384.93
Matthew's Heating & Plumbing (Installing Water at Y.M.C.A.)	199.43
Department Indian Affairs (Extending Water Main at Reserve)	2,691.96
Journal Voucher (Materials charged to Capital Account Water and sold to other City Departments, including entry in error, \$20,961.00)	<u>23,950.48</u>
TOTAL	<u>\$ 29,119.71</u>

Installations were made at the following locations:-

Location	Size of C. I. Pipe			
	10"	8"	6"	4"
Birch Court			431	
F'ton. Housing subdivision, Forest Hill	3041	815 29	998 48	428
Forest Hill supply line			325	
Hillcrest Drive			4	576
Indian Reserve, Carleton Ward				
Killarney Road Reservoir		204	833	
McEvoy Street			8	
Rookwood Avenue		78		
Titus Street		30	927	
Valley View Street			583	
Waggoner's Lane		387	50	
Windsor Street		583	9	
TOTALS	3041	2126	4216	1004

Total lineal footage, all sizes - 10,387 feet.

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

<u>Location</u>	<u>Labor and Machinery</u>	<u>Material</u>	<u>Total</u>
Birch Court	865.16	1,349.57	2,214.73
F'ton. Housing subdivision..	6,644.23	10,211.19	16,855.42
Forest Hill Supply Line	11,958.84	17,307.19	29,266.03
Hillcrest Drive	1,142.13	1,092.52	2,234.65
Indian Reserve	1,022.91	1,917.19	2,940.10
(Carleton Ward)			
McEvoy Street	1,863.85	2,428.92	4,292.77
Rookwood Avenue	727.35	277.46	1,004.81
Titus Street	2,124.35	3,372.51	5,496.86
Valley View Street	1,250.77	1,851.22	3,101.99
Waggoner's Lane	1,000.15	2,357.83	3,357.98
Windsor Street	1,788.41	3,008.83	4,797.24
* Killarney Road	---	1,375.98	1,375.98
Reservoir			
TOTALS	\$ <u>30,388.15</u>	<u>46,550.41</u>	<u>76,938.56</u>

* Labor and Machinery charged to Water Ordinary.

All above costs include any holdbacks on 1961 work which will appear in 1962 accounts.

The following is the average cost for laying the various sizes of pipe in place:-

- 10" Mechanical Pipe - \$9.45 per lineal foot
- 8" Mechanical Pipe varies from \$7.68 to \$8.58 per lineal foot
- 6" Mechanical Pipe varies from \$5.15 to \$7.22 per lineal foot
- 4" Mechanical Pipe varies from \$5.07 to \$6.12 per lineal foot

In addition, other projects were carried out under the heading "Capital Account Water" as follows:-

Capital Account Drilled Wells
 Capital Account Water Reservoir site,
 Montgomery Street

CAPITAL ACCOUNT DRILLED WELLS

Expenditure \$ 42,832.42

The above expenditure includes the following:-

1. Development of a Gravel Wall Well (Well No. 4) at Wilmot Park
2. Connecting No. 4 Well at Wilmot Park to City Supply Line and construction of a Surface Sewer from No. 4 Well to a Catch Basin on Woodstock Road
3. Construction of a Pump House at No. 4 Well at Wilmot Park
4. Landscaping grounds at No. 3 Well at Wilmot Park

1. Development of Gravel Wall Well No. 4

In 1960 the City of Fredericton entered into an agreement with the International Water Supply Company to develop a gravel wall well in Wilmot Park. This Well No. 4 is situated in Wilmot Park, approximately 300 feet southeast of Well No. 1. The construction of this Well was begun in 1960 and was completed in 1961. Water was turned into the City supply line on October 22, 1961 from Well No. 4.

The expenditures for the developing of this Well are as follows:-

Expenditure 1960 (Journal Vouchers, Labor & Machinery)	\$ 347.23
International Water Supply Co. (Contract Price)	33,300.00
International Water Supply Co. (Bradley Switch)	64.85
Provincial Secretary-Treasurer	2.71
Journal Voucher (City Labor)	57.78
Journal Voucher (City machinery)	16.00
Journal Voucher (Material)	<u>9.30</u>
TOTAL	<u>\$ 33,797.87</u>

2. Connecting No. 4 Well to City Supply Line & Surface Sewer

The expenditure under this heading amounted to \$2,251.31 and was made up as follows:-

T. McAvity and Sons Ltd. (Fittings, Valves, etc.) ...\$	193.58
Canada Iron Foundries Ltd. (Fittings)	25.35
Horsnell's Machine and Iron Works	40.58
Phillips & Pringle	11.01
Hagerman's Plumbing and Heating	9.65
J. S. Neill & Sons Ltd.	1.28
Journal Voucher (Material)	<u>1,547.54</u>
Journal Voucher (Machinery)	136.00
Journal Voucher (Labor)	<u>286.32</u>
TOTAL	<u>\$ 2,251.31</u>

3. To Construction of Pump House No. 4 Well at Wilmot Park

In 1961 tenders were called for the construction of a building to house the Pump and Equipment at No. 4 Well at Wilmot Park. This building was constructed by Weyman Construction Co. Ltd. The expenditure for the above building, including electrical, was as follows:-

Weyman Construction Co. Ltd.	\$ 5,400.00
E. Dobbelssteyn	378.27
Department Lands and Mines	7.00
Journal Voucher (Labor and Material)	<u>1,000.00</u>
TOTAL\$ <u>6,785.27</u>	

The total cost for the complete Well #4 is as follows:-

Development of Gravel Wall Well #4	\$ 33,797.87
Connecting No. 4 Well to City Supply Line and Catch Basin	2,251.31
Construction of Pump House and Electrical	<u>6,785.27</u>
TOTAL\$ <u>42,834.45</u>	

Also under this heading \$1,155.20 was expended on landscaping the grounds at Well No. 3 at Wilmot Park.

Cost of Well Water Supply to Date

1953	Test Hole Programme	\$ 7,500.00
1954	Supply line & Partial development #1 Well	42,271.16
1955	Develop, House and Connecting No. 1 Well	22,883.05
1956	Remote Control and Landscaping	3,048.33
1957	Develop, House and Connecting No. 2 Well	44,217.72
1958	Holdbacks, etc.....	7,641.01
1958 & 1959	Test Hole Programme	24,294.40
1960 & 1961	Develop, House and Connecting No. 3 Well	46,554.32
1961	Develop, House and Connecting No. 4 Well	<u>42,834.45</u>
TOTAL		\$ <u>241,244.44</u>

Capacity Available 2300 I.G.P.M.

Present Demand 1050 I.G.P.M.

Capital Account Water Reservoir Site - Montgomery Street

In 1961 the City of Fredericton entered into an agreement with York Structural Steel to erect a 250,000 Imperial Gallon Elevated Reservoir at a contract price of \$41,100.00 to take care of future City expansion. The construction of this tank began in 1961 and will be completed in 1962.

The 1961 expenditure under this heading was \$33,560.30 made up as follows:-

Anric Engineering Co. Ltd. (Surveying)	\$ 126.50
Sub Surface Survey Ltd. (Soils Investigation)	232.00
Forbes and Sloat (Gravel)	685.93
S. S. Baird & Sons (Gravel)	75.60
York Structural Steel Co. (Progress Estimates)	29,694.75
Journal Voucher (City Labor)	1,687.20
Journal Voucher (Machinery)	618.00
Journal Voucher (Material)	<u>440.32</u>
TOTAL	\$33,560.30 <u> </u>

CAPITAL ACCOUNT GRAVEL ROADS

Gross Expenditure	\$ 85,518.39
Credits	<u>6,247.68</u>
Net Expenditure	<u>\$ 79,270.71</u>

The above credits are made up as follows:-

Department of Indian Affairs	\$ 6,167.34
Journal Voucher (Material sold to other City Departments)	<u>80.34</u>
TOTAL	<u>\$ 6,247.68</u>

Included in the above expenditures are:-

1. Grading newly curbed streets
2. Grading and gravelling streets
3. New road construction and gravelling

1. The following newly curbed streets were graded and
gravelled:-

<u>Location</u>	<u>Lineal Feet</u>
Tourist Information Bureau (Woodstock Road)	382
St. Mary's St., Highland Avenue to City Limits	2,176
Highland Avenue, St. Marys St. toward City limits ...	1,569
Hughes Street, Union Street to MacLaren Avenue	1,224
Crerar Court	417
Irvine Street	888
Neill Street, MacLaren Avenue to McEvoy Street	989
Waggoner's Lane, Smythe Street toward Birch Court	90
Hazen Street	102
Fenety Street, Grandame St. to Windsor Street	380
Windsor Street, King's College Road to Fenety Street ..	1,109
King's College Road, Windsor Street to U.N.B. line ...	100
Smythe Street, Hawthorne Terrace to Montgomery St. ...	1,203
Woodbridge Street	1,163
Forest Hill Road, Vanier Highway to Woodbridge St. ...	<u>1,324</u>
TOTAL	<u>13,116</u>

2. The following streets were graded and gravelled:-

<u>Location</u>	<u>Lineal Feet</u>
Montgomery Street, York Street to Regent Street	1,260
McEvoy Street, MacLaren Avenue to end of Pavement ...	850
Rookwood Avenue, C.N.R. Crossing to Waggoner's Lane..	310
Squires Street, end of Construction 1959 to Back line of lots on Regent Street	500
Waggoner's Lane, Rookwood Avenue to 90 feet west of Smythe Street	<u>1,200</u>
TOTAL	<u>4,120</u>

3. The following streets were constructed and gravelled under this heading:-

<u>Location</u>	<u>Lineal Feet</u>
Birch Court	460
Canterbury Drive)	709
Chelsea Court)	245
Sheffield Court) Skyline Acres	650
Leicester Street)	310
Brighton Court)	200
Indian Reserve Road (charged to Federal Government)....	500
Mack Road	333
Parkside Development (Smythe Street)	600
Valley View Street, Hanson St. to Windsor St.	594
Windsor Street, Fenety St. to Montgomery St.	581
TOTAL	<u>5,182</u>

The gravel used under this heading was as follows:-

<u>Crushed Gravel</u>	<u>Pit Run Gravel</u>
Class A - 1 $\frac{1}{4}$ " Class C-3"	
24,430.212 tons	26,215.530 tons
	10,915.480 tons

For prices of Crushed and Pit Run Gravel, see item "Grading and Gravelling" under "Roads and Streets", Page 10.

CAPITAL INDUSTRIAL AREA (ROADS)

In August 1960 the Fredericton City Council passed a resolution to construct a road through the Industrial Area, near Doak Station. The construction of this road was begun in 1960 and completed in 1961.

Gross Expenditure	\$ 53,230.74
Credits	<u>5,240.05</u>
Net Expenditure	<u>\$ 47,990.69</u>

The above credits of \$5,240.05 are made up as follows:-

Federal Government (Winter Works Rebate)	\$ 4,072.55
T. H. Bourque and Sons (Sale of lumber, etc. from Industrial Area)	<u>1,167.50</u>
TOTAL	<u>\$ 5,240.05</u>

A new crossing authorized by the Board of Transport Commissioners was constructed on this Road. This new Railway Crossing eliminated the railway crossing at Doak Station and a portion of the Wilsey Road between the new Road and Doak Station.

The above portion of the Wilsey Road will be deeded to the Federal Government (Experimental Station) in exchange for right of way between the Wilsey Road and the new Railway Crossing of the Canadian Pacific Railway tracks into the Industrial area.

Clearing of the area (approximately 20 acres) between the Canadian Pacific Railway tracks and the new road was authorized by the City Council under the Federal Winter Works programme and the City was reimbursed the sum of \$4,072.55.

Total Cost for Industrial Road:-

1. Net Expenditure (1960).....	\$ 13,987.18
2. Net Expenditure (1961).....	<u>47,990.69</u>
TOTAL TO DATE	<u>\$ 61,977.87</u>

LOCAL IMPROVEMENT - 1961

In 1961 services were installed at the following locations, under the Local Improvement By-Law:-

<u>Location</u>	<u>Service</u>	<u>Cost</u>	<u>Subdivider's Share at By-Law Rates</u>	<u>Cost to City of Fredericton</u>
Birch Court	Water	\$ 2,214.73	1,150.24	1,064.49
	Domestic Sewer	1,480.11	1,353.79	126.32
	Storm Sewer	2,004.87	1,284.50	720.37
	Gravel Road	<u>3,068.54</u>	<u>1,407.15</u>	<u>1,661.39</u>
TOTALS		<u>\$ 8,768.25</u>	<u>5,195.68</u>	<u>3,572.57</u>
Windsor St. and Valley View Street	Water	7,899.23	1,175.28	6,723.95
	Domestic Sewer	5,621.93	1,441.38	4,180.55
	Storm Sewer	8,502.71	1,893.50	6,609.21
	Gravel Road	<u>10,500.48</u>	<u>1,330.50</u>	<u>9,169.98</u>
TOTALS		<u>\$ 32,524.35</u>	<u>5,840.66</u>	<u>26,683.69</u>
Parkside Development (Off Smythe St.)	Gravel Road	<u>5,183.99</u>	<u>1,500.00</u>	<u>3,683.99</u>
Mack Road (Off Trans Canada)	Gravel Road	2,450.39	699.00	1,751.39
Skyline Acres Forest Hill	Water	16,855.42	3,789.50	13,065.92
	Domestic Sewer	14,185.38	5,889.00	8,296.38
	Storm Sewer	20,008.42	7,482.45	12,525.97
	Gravel Road	<u>15,813.60</u>	<u>4,605.00</u>	<u>11,208.60</u>
TOTALS		<u>\$ 66,862.82</u>	<u>21,765.95</u>	<u>45,096.87</u>

All of the above services were constructed by contract, with City forces and machinery constructing the gravel roads.

115,789.80

35,001.29

80,788.57

PUBLIC WORKS

Gross Expenditure	\$ 29,008.66
Credits	<u>5,008.08</u>
Net Expenditure	23,920.58
1961 Appropriation	<u>24,100.00</u>
 CREDIT	 <u>\$ 179.42</u>

The Credits of \$5,088.08 were made up as follows:-

Mr. Prime (Sale plan of City of Fredericton)	\$.90
T. Eaton and Co. (3 Maps, City of Fredericton)	3.20
Canadian National Telegraph (2 Maps, City of Fredericton)	3.00
Paul Merrithew (1 Print, City of Fredericton)	1.50
Might Directories (1 Print, City of Fredericton) ...	2.40
Department of Mines & Technical Surveys (Sale of Paper)	1.20
Golden Take-Out Service (1 Print, City of F'ton.) ..	1.20
Journal Voucher (Mowing)	100.00
Journal Voucher (Flood Repairs Back Drain Diversion)	2,621.68
Journal Voucher (Reclamation of low land, Grieves Creek)	2,000.00
Journal Voucher (Material)	2.00
Journal Voucher (Machinery)	<u>351.00</u>
 TOTAL	 <u>\$ 5,088.08</u>

The labor charge under the Public Works expenditure was incurred as follows:-

Trees	\$ 8,099.61
Survey	209.52
Back Drain	51.76
Surface Sewer	81.15
Unforseen	<u>5,883.29</u>
 TOTAL ..	 <u>\$ 14,325.33</u>

TREES

Expenditure

\$ 12,462.48

The above expenditure includes \$8,099.61 for labor, \$2,899.50 for machinery (Jeeps, trucks, shovels, etc.) \$863.37 for material charges and \$600.00 to Mr. Charles Smith, Honorarium for services rendered.

In 1961, 71 trees were removed on the recommendations of the Fredericton Tree Commission. The condemned trees were either in a decadent condition or were a menace to public safety.

Following is the list of trees removed in 1961:-

15 Spruce	4 Poplar	2 Hemlock
1 Oak	2 Locust	2 Yellow Birch
32 Elm	12 Maple	1 Mountain Ash

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

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

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. Two such trees were found this year, one at the rear of Charles Dougherty property, Smythe Street and the other on the Lincoln Road, near White Rose Service Station on the property of Mr. Evald Larsen.

Permission for the removal of trees on private property as well as a statement to the effect that no claim for damage 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.

411 trees were pruned during the year, as well as the usual planting programme.

Trees were planted at the following locations:-

St. John Street, near Scully St.	-	Replacement
197 Rookwood Avenue		
MacLaren Avenue - 700 Block		
Green Road, Mitchell Street to York Street		
38 Fairlawn Court	-	Replacement
760 Dobie Street	-	Replacement
462 Gibson Street		
318 Edinburgh Street	-	Replacement
395 Northumberland Street	-	Replacement
Inglewood Drive		
Sherwood Court		
Elmwood Court		
Shamrock Terrace		
Hawthorne Terrace		
Green Road, Smythe Street towards York Street		
Northumberland St., Dundonald St. to Connaught Street		
Dundonald Street, Northumberland St. to Smythe Street		
Saunders Street, Odell Avenue to Rookwood Avenue		
University Avenue common		

Under the above heading, the following trees were purchased in 1961:-

33 Acer Platenoides @ \$3.50 each	\$ 115.50
32 Acer Saccharium @ \$3.50 each	112.00
34 Acer Nigrum @ \$4.25 each	144.50
8 Oak Rubrum @ \$3.00 each	24.00
8 Oak Borealis @ \$3.00 each	24.00
6 Moraine Locust @ \$3.25 each	19.50
7 Brioti Locust @ \$4.00 each	28.00
5 Oak Splendens @ \$3.75 each	18.75
8 Tilia Cordata @ \$3.50 each	28.00
2 Acer Urbrum @ \$3.50 each	7.00
8 Tilia pallida @ \$3.50 each	28.00
	<u>\$ 549.25</u>
Plus Freight	<u>31.50</u>
TOTAL	<u>\$ 580.75</u>

SURVEYING:-

Under this heading the expenditure amounted to \$547.47 made up of \$209.52, wages for labor and \$337.95 for material charges.

The labor charge of ~~\$547.47~~ was for helpers with the Engineers during the course of their work during 1961, on other than programmed projects.

The material charges of \$337.95 were made up as follows:-

J. Hilton Hawkins (Stakes)	\$ 120.00
Paul Burden Ltd. (Pencils, Field Books, Ink, etc.)	12.77
Provincial Secretary Treasurer (Tax on Stakes)	3.60
J. C. Risteen Co. (Stakes)	4.12
J. S. Neill & Sons Ltd. (Crayon, Twine, etc.)	2.56
Anric Engineering Co. Ltd. (Prints on Surveys)	16.00
Anric Engineering Co. Ltd. (Survey for Y.M.C.A. building)	118.50
Anric Engineering Co. Ltd. (Work on Y.M.C.A. plan)	<u>60.40</u>
TOTAL	<u>\$ 337.95</u>

BACK DRAIN:-

Expenditure \$ 51.76

The above expenditure was labor charges to Back Drain for maintenance. The expenditure due to the flood on the Back Drain was charged to "Roads and Streets" under "Flood Repairs" and is shown on Page 14.

SURFACE SEWERS:-

Expenditure \$ 202.63

The above expenditure is made up as follows:-

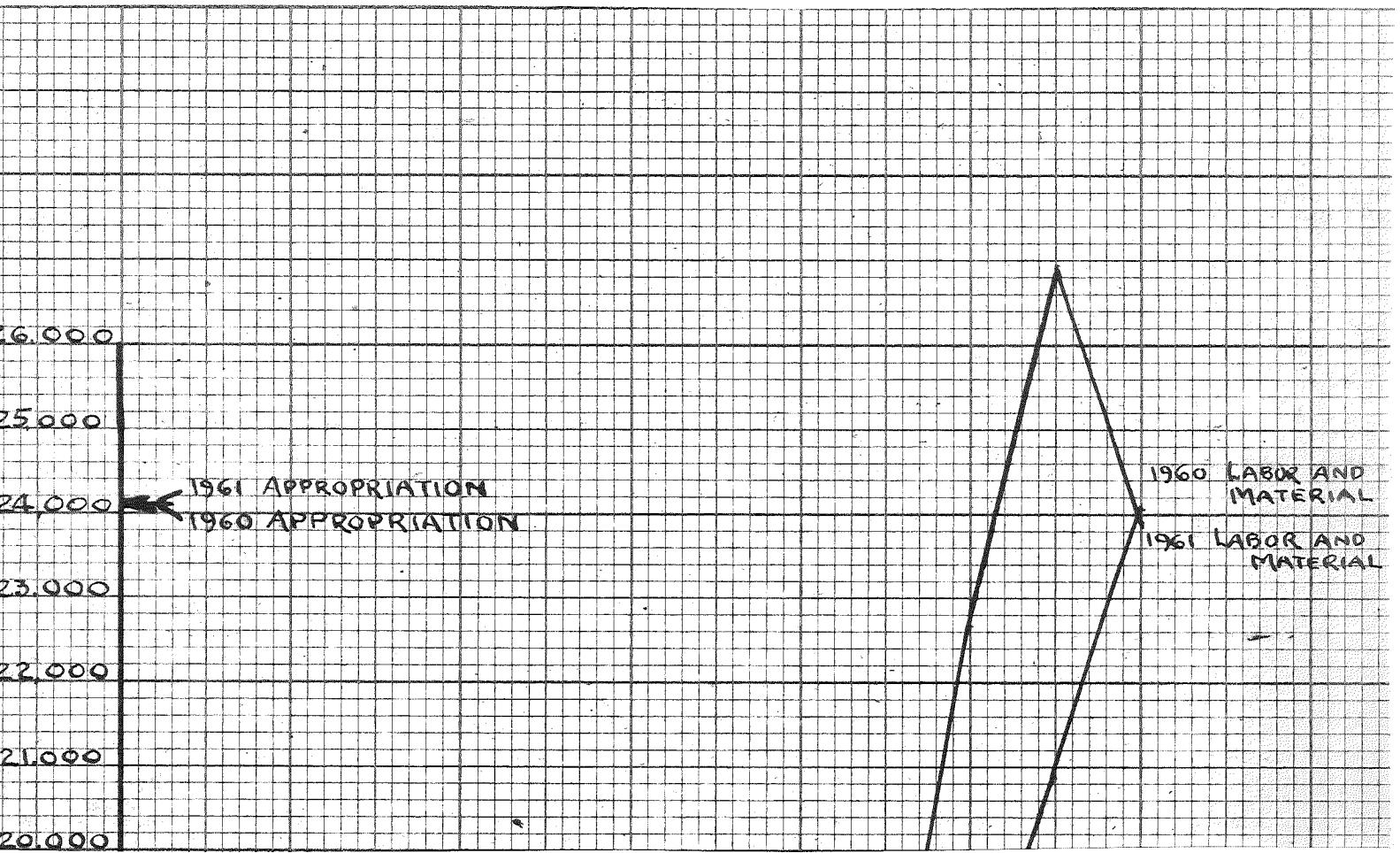
Labor	\$ 81.15
Machinery	32.00
Material	<u>89.48</u>
TOTAL	<u>\$ 202.63</u>

Under this heading the Surface Sewer on the Green, near Alexandra Street was cleaned and repaired and the Surface Sewer at the rear of the Victoria Public Hospital was extended.

UNFORSEEN ACCOUNT - LABOR

Removal of Christmas Trees on City Streets	\$ 107.22
Placing Trees around Sewer Outfall, Lansdowne St.	5.70
Construction of Table and Cabinets	108.68
Greens (Cutting, raking, seeding, fill, etc.)	2,974.62
Cleaning Logs from Campbell Street (Spring Freshet 1961)	154.32
Removal of fence on Regent Street	15.03
Flood repairs on Back Drain	2,049.40
Spraying Swamps	26.71
Cleaning Wharf (Regent Street)	30.54
Filling Parking Lots	228.38
Sir James Dunn Fountain (Queen Street)	24.80
Repairing fence railing, Federal Building	14.82
Preparing for Civic Election	43.68
Benches (Repairs, painting, moving, etc.)	32.01
Supplying Water to Navy Boat at Regent St. Wharf	4.56
Gravelling path at Carleton Ward School	19.28
Labor at Wilsey Road fire	4.56
Repairing fence at Rifle Range	<u>38.98</u>
TOTAL	<u>\$ 5,883.29</u>

Included in the expenditure to Public Works was the purchase of 25 Park Benches at a cost of \$751.00 from Mr. Arthur Woods.



ODELL PARK

Expenditure \$ 4,859.24

The Gross expenditure of \$4,859.24 is made up as follows:-

Fredericton Tire Ltd. (Use of shovel at Pony Club) ...	\$ 20.00
N. B. Telephone Company	51.59
Workmen's Compensation (Assessment for 1961)	203.28
Ashfield Construction Co. Ltd. (Holdbacks on Water and Sewer laid in 1960)	349.17
J. S. Neill & Sons Ltd. (Shovels, rakes, brooms, axes, file, paint, etc.)	44.88
E. M. Young Ltd. (Chain, eyes, hooks)	2.02
S. S. Baird & Sons Ltd. (442.800 tons 1 $\frac{1}{4}$ " Crushed Gravel @ \$1.18 per ton)	522.50
Eastern Chain Saw (New carburetor)	23.10
Journal Voucher (Material)	1.78
Journal Voucher (Machinery)	427.00
Journal Voucher (Labor)	3,147.68
Journal Voucher (Holidays)	66.24
TOTAL	\$ 4,859.24

CARLETON PARK

Gross Expenditure \$ 4,398.85

Credit 59.50

Net Expenditure \$ 4,339.35

The above Credit of \$59.50 was rebate on 17 Red Maples charged to Carleton Ward Park.

The expenditures in Carleton Park for 1961 were as follows:-

Canadian Pacific Railway Co. (Rental, Gibson Street north)	\$ 500.00
Canadian Pacific Railway Co. (Rental, Gibson Street south)	700.00
John Gibson & Sons Ltd. (2 tons 10-6-4 Fertilizer)....	105.00
Mr. Charles Smith (17 Red Maples)	52.50
J. C. Risteen Co. Ltd. (Stakes)	4.12
S. S. Baird & Sons Ltd. (2275 yards fill @ 50¢ per Yard)	1,137.50
Forbes & Sloat (59.515 tons 1 $\frac{1}{4}$ " crushed gravel @ 76¢ per ton)	45.23
Mr. William Thomas (Hauling 35.765 tons Gravel @ 45¢ per ton)	16.09
Weyman Construction Co. (Hauling 23.750 tons gravel @ 45¢ per ton)	10.69
Journal Voucher (Machinery)	870.00
Journal Voucher (Labor)	957.72
TOTAL	\$ 4,398.85

For the above expenditure, paths were scuffed, grass was kept mowed and in general, the Park was kept in a clean and orderly condition.

Considerable work was done this year on the South portion of Carleton Park, that is the area from Gibson Street, south along Union Street to the Diamond Construction Co. property line. The land was levelled and fill and crushed gravel applied where necessary. Further development of this area is expected to be carried out in 1962.

WILMOT PARK

Gross Expenditure	\$ 9,105.56
Credits	<u>2,850.00</u>
Net Expenditure	<u>\$ 6,255.56</u>

The credits are made up as follows:-

Journal Voucher (landscaping around Drilled Wells)	\$ 2,000.00
Journal Voucher (Labor and machinery - levelling excess fill, originally charged to Wilmot Park, charged to Roads and Streets)	<u>850.00</u>
TOTAL	<u>\$ 2,850.00</u>

The above expenditure of \$9,105.56 is made up as follows:-

Materials used on lawns and flower beds	\$ 256.67
Materials used on Grounds, including paths	2,123.62
Supplies and repairs to lawn mower	84.61
New Brunswick Telephone Company	50.64
Materials used in repairing Band Stand	486.98
Materials and labor used on repairs to house	70.51
Flood Lights at Wilmot Park Wading Pool)	282.55
Journal Voucher (Labor)	4,719.44
Journal Voucher (Machinery)	907.50
Journal Voucher (Material)	10.56
Miscellaneous (Tools, trash cans, etc.)	<u>112.48</u>
TOTAL	<u>\$ 9,105.56</u>

In 1961 considerable work was done to improve the grounds at Wilmot Park. New paths were constructed, shrubs were planted and top soil and grass seed was applied where necessary. In addition the band stand was repaired and painted and flood lights were installed at the childrens' wading pool.

RECREATION

Expenditure \$ 2,701.36

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

The above cost is divided as follows:-

Journal Voucher (Gas and Oil)	\$ 134.13
Journal Voucher (Machinery)	299.00
Journal Voucher (Sand, Sewertite, C.I.Pipe, T.C.Pipe, Reducers, Cement, etc.) ...	1,683.28
Journal Voucher (Labor)	<u>584.95</u>
TOTAL	<u>\$ 2,701.36</u>

In 1961 a swimming pool was constructed in Carleton Ward by Weyman Construction Company.

Included in the above expenditure was the installing of a 4" C. I. Water Main (238') and a 8" T. C. Domestic Sewer to the newly constructed pool.

CITY HALL

Expenditure \$ 523.42

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

The expenditure of \$523.42 is made up as follows:-

Labor at City Hall, including winding and repairs to clock	\$ 483.76
J. S. Neill & Sons Ltd. (Drills, bulbs, brushes)	6.74
J. C. Risteen Co. Ltd. (Lumber)	10.92
Journal Voucher (Machinery)	<u>22.00</u>
TOTAL	<u>\$ 523.42</u>

The fountain in front of the City Hall was repaired and painted in 1961.

MUNICIPAL HOME

Expenditure	\$ 152.95
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The above cost is of course, only part of the Municipal Home costs, but is the expenditure which was made through the office of the City Engineer and is therefore shown in this report.

The above expenditure is made up as follows:-

Journal Voucher (Snowplowing)	\$ 80.00
Journal Voucher (Machinery)	10.00
Journal Voucher (Labor)	<u>62.95</u>
TOTAL	<u>\$ 152.95</u>

SEWERAGE DOMESTIC

Gross Expenditure	\$ 34,385.57
Credits	<u>10,860.36</u>
Net Expenditure	<u>\$ 23,525.21</u>

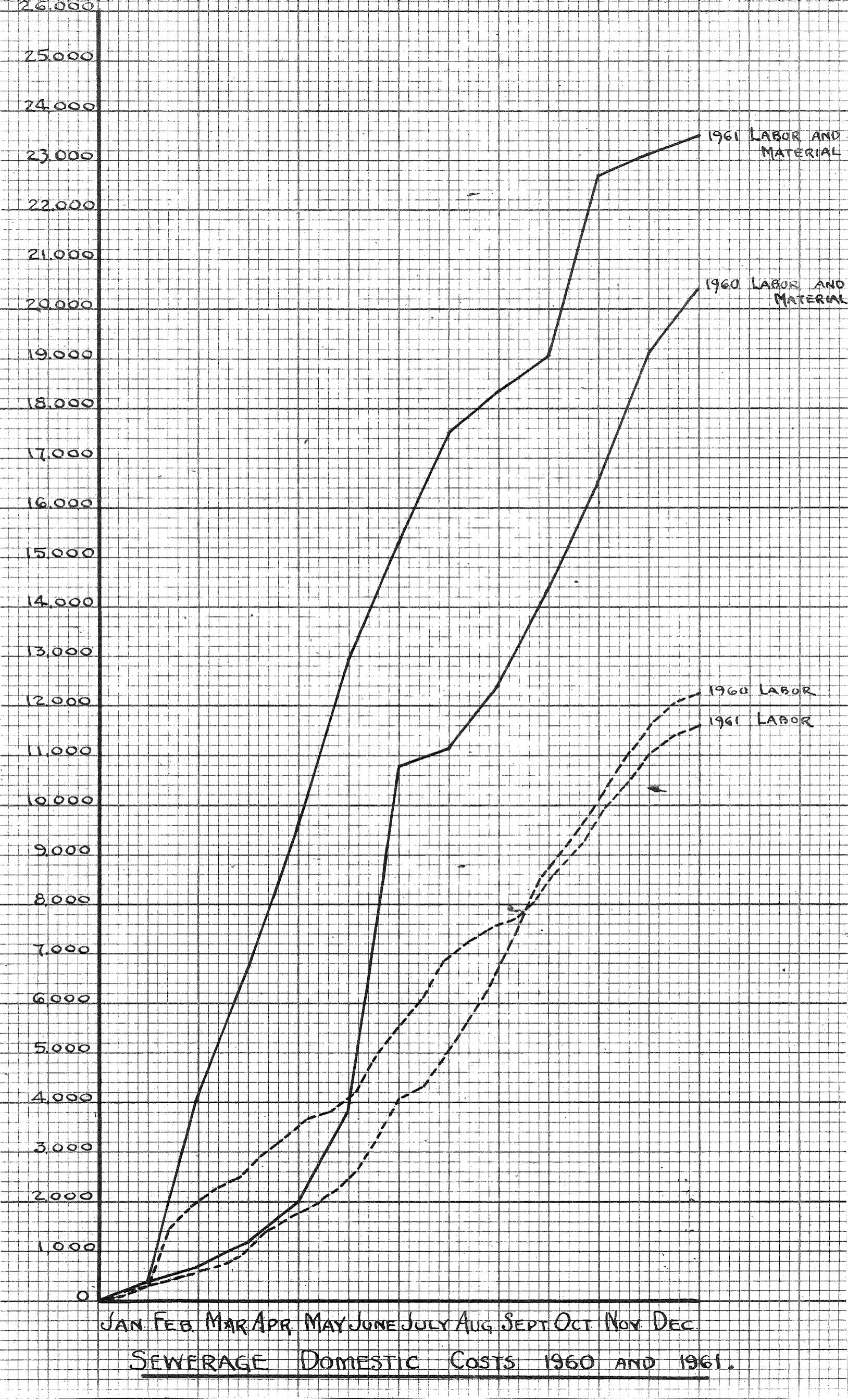
The above credits are made up as follows:-

Material, Labor and Machinery supplied for house connections	\$ 10,142.74
Wood Motors Ltd. (Cleaning floor drain)	7.12
J. Clark & Sons Ltd. (Cleaning floor drain)	10.28
Nashwaaksis Local Improvement (Thawing Sewer Mains) ..	448.08
Creighton Motors Ltd. (Sale of 87 $\frac{1}{2}$ ' of 5" T.C.Pipe) ...	39.38
Irving Oil Co. Ltd. (Sale of #50 Sanfax)	22.60
Fredericton Boat Club (Cleaning floor drain)	3.64
Phillips & Pringle Ltd. (Cleaning floor drain)	3.64
Capital Co-operative Ltd. (Cleaning sewer)	14.64
Imperial Oil Co. Ltd. (Cleaning floor drain)	4.49
Journal Voucher (Material)	<u>163.75</u>
TOTAL	<u>\$ 10,860.36</u>

New customers connected to City Sewer System this year were 133.

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

All sewers were flushed and cleaned in 1961.



The Fredericton Domestic Sewer System consists of 47.65 miles (11.32 miles in Carleton Ward and 36.33 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
8" Transite Pipe (Asbestos Cement)	<u>.53</u> miles
C E D	
TOTAL	<u>47.65</u> miles

OLD BURIAL GROUND

The Old Burial Ground between Brunswick Street and George Street was kept in good condition in 1961.

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 wherever necessary.

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

John Gibson & Sons Ltd. (1 ton, 10-6-4 Fertilizer) ..	\$ 52.50
Mrs. Alta Ashfield (58 yds. top soil)	58.00
Capital Co-operative Ltd. (1 ton, 10-6-4 Fertilizer)	52.20
James S. Neill & Sons Ltd. (Parts for Power Mower) ..	24.97
Maritime Electric Co. Ltd. (6 Fluorescent Lights) ...	450.00
Journal Voucher (Machinery)	227.00
Journal Voucher (Gas and Oil)	5.07
Journal Voucher (City Labor)	<u>2,014.08</u>
TOTAL	
\$ 2,883.82	

CEMENT WALKS

Gross Expenditure	\$ 20,311.41
Credits	<u>1,481.10</u>
Net Expenditure	<u>\$ 18,830.31</u>

The above credits are made up as follows:-

Journal Voucher (245' concrete sidewalk, 150' curbs charged to Roads and Streets).....	\$ 752.50
Federal Government (Winter Works Incentive Programme. This credit will appear in 1962 Accounts)	<u>728.60</u>
TOTAL	<u>\$1,481.10</u>

For the above expenditure of \$18,830.31 concrete sidewalks were laid at the following locations:-

<u>Location</u>	<u>Lineal Feet</u>
King's College Road, Smythe St. towards East (north side)	1,037
York Street, King's College Road towards south (west side)	730
Mitchell Street, King's College Road to Squires Street (east side)	230
Reid Street, King's College Road to Regent Street (west side)	919
Beaverbrook Street and Court (north side)	437
Dundonald St., York St. to Beaverbrook Court (north side)	873
Windsor Street, King's College Road to Albert Street (west side)	1,368
Rookwood Avenue, Woodstock Road towards South (west side)	506
Hillcrest Drive, Clark St. towards west (south side)..	945
Hughes St., MacLaren Avenue to Union St. (east side)..	1,260
Union Street, Hayes St. to St. Mary's St. (south side)	283
University Avenue, Alexandra St. to C.N.R. tracks (east side)	85
Fenety Street, Hazen St. to Windsor St. (north side)..	741
Graham Avenue, Albert St. towards South (west side)...	<u>518</u>
TOTAL	<u>9,932</u>

The cost of the above sidewalks was paid, one-half by the City and one-half by the property owner.

The concrete for the above construction of sidewalk was obtained from Elmtree Concrete Ltd. @ \$14.50 per cubic yard.

The total cost for laying the above lineal feet of concrete sidewalk was \$1,911 and was obtained by dividing the total lineal feet 9,932 into the total cost, which was \$18,830.31.

The property owner was charged 94¢ per lineal foot, which does not include Workmen's Compensation, Pension and Holiday Fund. Due to an adjustment made by the auditors, the credit under "Winter Works Incentive Programme" credited to this account, was reduced after the billing, thus making the cost per lineal foot of 96¢ to the property owner.

SANITATION

Gross Expenditure	\$ 51,371.86
Credits	<u>299.08</u>
Net Expenditure	<u>\$ 51,072.78</u>

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

1. Dump
2. Sanitary Land Fill
3. Street Cleaning

1. Dump

Expenditure\$ 4,557.32

The above expenditure of \$4,557.32 is made up as follows:-

Journal Voucher (Labor and Hired Trucks)	\$ 3,649.20
Journal Voucher (Machinery)	892.00
Journal Voucher (Material)	<u>16.12</u>
TOTAL	<u>\$ 4,557.32</u>

The above dump was closed December 13, 1960. In 1960 part of this dump site was levelled and covered with material from ditching excavation and in 1961 the remaining area was levelled and covered with material from ditching excavation material from the Doak Road. This area should be retained by the City for future use.

The Garbage Collection was operated by Mr. J. A. Coates until October 25, 1961. The Garbage Collection is now being operated by H. R. Corey, Fredericton Limited. The amount paid in 1961 for this operation was \$40,975.00.

2. Sanitary Land Fill

Gross Expenditure	\$ 5,124.79
Credits	<u>94.68</u>
Net Expenditure	<u>\$ 5,030.11</u>

The above credits are made up as follows:-

Atlas Construction Co. Ltd. (1436 yards fill @ 5¢ per yard)	\$ 71.80
Journal Voucher (Labor)	<u>22.88</u>
TOTAL	<u><u>\$ 94.68</u></u>

The above expenditure is made up as follows:-

Auto Machinery & General Supply Co. Ltd. (Plugs, points)	\$ 2.30
Horsnell's Iron & Machine Works (Parts for oil tank funnel, cover for reservoir).	43.45
Daily Gleaner (Printing Notices)	44.52
Maritime Accessories Ltd. (Gas, cap, cap screws).....	.91
J. Clark & Sons Ltd. (Repair to Tractor)	23.37
S. S. Baird & Sons Ltd. (730.54 tons crushed gravel)..	831.69
Journal Voucher (Gas, Oil and Anti-Freeze).....	42.54
Journal Voucher (Machinery)	1,157.50
Journal Voucher (Supply and spreading gravel)	700.00
Journal Voucher (Labor)	<u>2,278.51</u>
TOTAL	<u><u>\$ 5,124.79</u></u>

In 1961 the dumping area at the Sanitary Land Fill was expanded. It was necessary to remove stumps from the area and prepare the area for the disposal of garbage.

In 1961 Mr. Kenneth L. Barker was awarded the contract for bulldozer services at the Sanitary Land Fill at a cost of \$12,441.72 per year. The contract was effective March 1, 1961 and the cost of bulldozing services for 1961 was \$10,368.10, thus making the total cost of Sanitary Land Fill operations, \$15,398.21 for the year 1961, a saving of \$1,698.67 over the former Incinerator and Dump method of operation used in 1960.

3. Street Cleaning

Gross Expenditure	\$ 41,689.75
Credits	<u>204.40</u>
Net Expenditure	<u><u>\$ 41,485.35</u></u>

The above credits of \$204.40 are made up as follows:-

Journal Voucher (Material)	\$ 154.40
Journal Voucher (Machinery)	<u>50.00</u>
TOTAL	<u><u>\$ 204.40</u></u>

The labor expenditure charged to this account amounted to \$29,138.46 and city machinery and material charges amounted to \$12,551.29.

The above expenditure of \$12,551.29 is made up as follows:-

Hand Brooms, Shovels, Rakes, Forks, repairs to carts, etc.	\$ 926.82
Rental on 1953 Elgin Sweeper	849.75
Labor and repairs on 1960 Elgin Sweeper and purchase of Brooms and Gutter Broom Wire	4,375.82
Repairs and labor charges on Sicard Flusher	616.37
Gas, Oil and Antifreeze to Sweeper and Flusher:- 4,375.3 Gallons Gasoline	1,083.96
195 Quarts of Oil	65.34
3 Gallons Antifreeze	7.20
Sanfax Corporation (45 Gallons Sanfax, plus tax)	255.22
Journal Voucher (City Machinery)	3,761.94
Constructing and Painting Waste Cans	128.09
Journal Voucher (Proportion of Compensation Costs) ...	<u>480.78</u>
TOTAL	<u>\$12,551.29</u>

The Elgin Street Sweeper (purchased in 1960) worked 1,092½ hours and the sweeper on rental from Musselsens Ltd. worked 144 hours, thus making the total hours worked 1,236½ in 1961. The actual cost for cleaning streets with these machines was \$10,220.76 and was computed as follows:

Labor and repairs on 1960 Elgin Sweeper and purchase of Brooms and Gutter Broom Wire	\$ 4,375.82
Rental on 1953 Elgin Sweeper from Musselsens Ltd.	849.75
Gas (1,586.9 Gallons)	401.25
Oil (61 Quarts)	20.13
Water (372,000 Gallons)	139.20
Insurance on 1960 Elgin Sweeper	36.80
Depreciation on 1960 Elgin Sweeper	2,221.56
Labor (Including Workmen's Compensation, Holiday and Pension Fund)	<u>2,176.25</u>
TOTAL	<u>\$ 10,220.76</u>

The operating dates for the above machines (Sweepers) were from April 20, 1961 to December 8, 1961.

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 were from April 12, 1961 to November 18, 1961.

The Flusher worked 988 hours. The actual cost for flushing streets with this machine was \$5,898.49 and was computed as follows:-

Labor and repairs charged to Sicard Flusher	\$ 616.37
Gas (2,688.4 Gallons)	682.71
Oil (137 Quarts)	45.21
Antifreeze(3 Gallons)	7.20
Water (4,446,000 Gallons)	806.98
Insurance	63.00
Depreciation	1,950.00
Labor (Including Workmen's Compensation, Holiday and Pension Fund)	<u>1,727.02</u>
TOTAL	<u>\$ 5,898.49</u>

Following is the list of machinery used and charged to Sanitation, showing a comparison of repair charges for 1960 and 1961, including tires and tubes.

<u>Name of Machine</u>	<u>Year Purchased</u>	<u>Repairs 1960</u>	<u>Repairs 1961</u>
Elgin Street Sweeper Sicard Flusher (2250 I.G.)	1960 1955	645.95 932.01	2,641.75 776.93

CITY SCALES

Expenditure	\$ 424.01
Credit	<u>233.40</u>
Net Expenditure	<u>\$ 190.61</u>

The above credit of \$233.40 was amount charged to Capital Account Gravel Roads and credited to City Scales for weighing Gravel.

The expenditure of \$424.01 was made up of wages for extra help during operator's holidays, thawing scales during the spring of 1961 and relaying floor of Weight Scales where necessary.

The wages of the Weigh Scale Operator do not appear in the above expenditure. This expenditure is not made through the office of the City Engineer and is therefore not shown in this report.

FIRE DEPARTMENT

Expenditure	\$ 9,524.05
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The above expenditure is made up as follows:-

Journal Voucher (City Labor)	\$ 51.35
Journal Voucher (City Machinery)	56.50
Journal Voucher (2,449.6 Gallons Gasoline)	656.20
Journal Voucher (365 Hydrants, rental)	<u>8,760.00</u>
TOTAL	<u>\$ 9,524.05</u>

ADMINISTRATION of JUSTICE

Expenditure \$ 3,333.58

The above expenditure is made up as follows:-

Journal Voucher (10,320.9 Gallons Gasoline, 116 Quarts of Oil)	\$ 2,825.54
Journal Voucher (Labor)	315.14
Journal Voucher (Machinery)	186.00
Journal Voucher (Material)	<u>6.90</u>
TOTAL	<u>\$ 3,333.58</u>

GOVERNOR GENERAL'S VISIT

Expenditure \$ 390.35

The above expenditure was incurred in the preparation of the visit of Governor General Vanier, and amounted to \$254.68 for labor and \$135.67 for material charges.

The material expenditure of \$135.67 was made up as follows:-

J. C. Risteen Co. (Lumber, strapping, etc.)	\$ 20.60
J. S. Neill & Sons Ltd. (Pails, staples, clamps, paint)	21.87
Horsnell's Machine & Iron Works (Constructing flag pole)	34.30
C. W. Hall & Co. Ltd. (12 sheets cardboard)	2.83
Atlas Building Supplies (3 sheets 1 $\frac{1}{4}$ " plywood)	10.78
H. S. Gill and Sons Ltd. (266' - 2 x 2 Spruce D4S)...	23.29
Journal Voucher (Machinery)	<u>22.00</u>
TOTAL	<u>\$ 135.67</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 of the lots in Elmcroft Place was improved in 1958.

In 1961 the expenditure amounted to \$217.94. It is intended that this area be used as a tourist attraction with pedestrian traffic only from the Little League Ball Field on the Flats.

MUNICIPAL PARKING LOT

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

The expenditure for the upkeep of the above Parking Lot for 1961, as shown through the office of the City Engineer, was \$339.76 and was made up as follows:-

Journal Voucher (Labor)	\$ 207.76
Journal Voucher (Machinery)	<u>132.00</u>
TOTAL	<u>\$ 339.76</u>

The above labor charge was for plowing snow and keeping the parking lot in a satisfactory condition.

J. T. CLARK MEMORIAL BUILDING

Under this heading the expenditure amounted to \$262.56 and was for labor and material incurred in erecting new flag pole and constructing a wire fence around the greens in front of and along the sides of the building and placing wooden steps for winter use.

CONTINGENT

Expenditure\$ 481.04

In 1960, Lord Beaverbrook donated a fountain to the City of Fredericton. This fountain was erected in 1961 on the Green on Queen Street, approximately 100 feet east of the Robert Burns Monument.

The above expenditure of \$481.04 was for labor and material for winterized protection to the fountain. The above structure was erected by the Diamond Construction Co. Ltd.

LADY BEAVERBROOK RINK

Expenditure \$ 38.22

The above expenditure was made up as follows:-

Journal Voucher (Labor)	\$ 6.22
Journal Voucher (Machinery)	12.00
Journal Voucher (20 Bags of Salt)	<u>20.00</u>
TOTAL	<u>\$ 38.22</u>

TOURIST and INDUSTRY

Under this heading the expenditure amounted to \$573.41 and was for material, labor and machinery charged for painting and erecting signs for the Industrial Area site.

STREET LIGHTS

The City Street Lighting system on December 31, 1961 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 NO. 1

The Series Lighting System consists of some 22.48 miles of line and 307 lamps. This system is divided into four circuits, one of which is controlled by a 25 K.W. constant current transformer, the other three by 15 K.W. constant current transformers. Three of these transformers along with the main switchboard are housed in a building, the site of which was purchased from Willett Fruit Company on Carleton Street, south of Needham Street. The fourth transformer is on a pole situated on Regent Street, between King's College Road and Albert Street and controls the rear circuit for Maryland Heights.

The four circuits are made up as follows:-

<u>Lower Front Circuit</u>	<u>Load</u>	<u>Transformer Size</u>
22-600 C.P. Lamps @ .350 K.W. demand	7.70 K.W.	
38-250 C.P. Lamps @ .160 K.W. demand	<u>6.08</u> K.W.	
	13.78 K.W.	15 K.W.
<u>Upper Front Circuit</u>		
32-250 C.P. Lamps @ .160 K.W. demand	5.12 K.W.	
11-Fluorescent Lamps @ .50 K.W. demand	<u>5.50</u> K.W.	
	10.62 K.W.	15 K.W.
<u>Upper Rear Circuit</u>		
31-600 C.P. Lamps @ .350 K.W. demand	10.85 K.W.	
86-250 C.P. Lamps @ .160 K.W. demand	13.76 K.W.	
4 Fluorescent Lamps @ .50 K.W. demand	<u>2.00</u> K.W.	
	26.61 K.W.	25 K.W.
<u>Maryland Heights</u>		
6-600 C.P. Lamps @ .350 K.W. demand	2.10 K.W.	
77-250 C.P. Lamps @ .160 K.W. demand	<u>12.32</u> K.W.	
	14.42 K.W.	15 K.W.

During the winter months of 1960 and 1961, the Series Lighting System was changed from five series circuits as in previous years, to four series circuits. The Lower Rear Circuit was changed to a Multiple Lighting System.

SYSTEM #2 and #5

The Multiple Lighting System, as of December 31, 1961 was as follows:-

228-500 Watt Incandescent Units @ \$60.00 per light per year
179-200 Watt Incandescent Units @ \$40.00 per light per year
58-400 Mercury Vapor Units @ \$90.00 per light per year
83 - 4 ft. Fluorescent Units @ \$60.00 per light per year
15 - 6 ft. Fluorescent Units @ \$75.00 per light per year

Each of the above units, excepting the Fluorescents, consists of either a 500, 400 Mercury or 200 Watt 125 Volt Lamp, set in a nouvalex luminair 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 4' Fluorescent Lamp and \$75.00 per year for each 6' Fluorescent Lamp.

SYSTEM #3

System No. 3 consists of 4 Multiple Lights, each of 150 Watt strength, located in C.N.R. Subway. This system is also controlled by a control switch which is energized by the series lighting system.

SYSTEM #4

System No. 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 190 lamps. The system originally comprised three circuits, but in 1960 a new circuit was added due to change from 2500 lumen series lamps on Gibson, Barker and Union Streets, east of Gibson Street to Fluorescent 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 areas:-

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

Carleton Ward (Up)

<u>Load</u>	<u>Transformer Size</u>
.70 K.W.	
5.92 K.W.	
<u>7.50 K.W.</u>	
14.12 K.W.	15 K.W.

Carleton Ward (Central)

46-250 C.P.Lamps @ .160 demand	7.36 K.W.
11-Fluorescent Lamps @ .50 demand	<u>5.50 K.W.</u>
	12.86 K.W. 15 K.W.

Carleton Ward (Down Front)

2-600 C.P.Lamps @ .350 demand	.70 K.W.
21-250 C.P.Lamps @ .160 demand	3.36 K.W.
18-Fluorescent Lamps @ .50 demand	<u>9.00 K.W.</u>
	13.06 K.W. 15 K.W.

Carleton Ward (Down rear)

19-250 C.P.Lamps @ .160 demand	3.04 K.W.
21-Fluorescent Lamps @ .50 demand	<u>10.50 K.W.</u>
	13.54 K.W. 15 K.W.

The power for systems 1, 3 and 4 is purchased from the Maritime Electric Company at a contract price as agreed upon in a contract between the Maritime Electric Company and the City of Fredericton, made in 1957. This contract also covers the maintenance cost of \$20.00 per year per mile of pole line which is paid for by the City to the Company.

All materials such as wire, poles, pole fixtures, lamps, lamp fixtures, transformers, etc. are paid for by the City and 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, both labor and material.

The Street Lighting Costs for the year 1961 are as follows:-

Gross Expenditure	\$ 46,998.29
Credits	<u>162.55</u>
Net Expenditure	\$ 46,835.74
1961 Appropriation	<u>46,965.00</u>
CREDIT	\$ <u>129.26</u>

The above credits of \$162.55 are made up as follows:-

Maritime Electric Co. Ltd. (100# Wire @ .40¢ per pound)	\$ 40.00
Maritime Electric Co. Ltd. (25# Wire @ .40¢ per pound)	10.00
Maritime Electric Co. Ltd. (Painting and Repairing broken pole)	5.55
Maritime Electric Co. Ltd. (200 L.F. Street Light Cable)	<u>107.00</u>
TOTAL	<u>\$ 162.55</u>

The Street Lighting expenditure of \$46,998.29 is made up as follows:-

63-No.F 48 PG 17/CW Fluorescent Lamps	\$ 314.68
8 - No.F 72 PG 17/CW Fluorescent Lamps ...	44.63
30 - No. F 48 T 12/CW Fluorescent Lamps ..	71.39
96-600 C. P. Series Lamps	96.67
623-250 C. P. Series Lamps	<u>383.52</u>
Replacement cost 1961	\$ 910.89
Power Costs for Subways and Series Lighting, December 22, 1960 to December 22, 1961 (420200 K.W. Hours)	10,557.19
Charges on Multiple Fixtures owned and operated by the Maritime Electric Company @ \$40.00, \$60.00, \$75.00 and \$90.00 per light per year ...	31,260.77
Maintenance and Contract of Pole Line	621.36
Maintenance of Lamp Fixtures, including only such articles as lamp standards, lamp brackets, heads, sockets, shades, cutouts, time switches, etc.	<u>381.50</u>
Forward	\$ 33,731.71

	Carried Forward	\$ 33,731.71
Material and Labor used in major repairs and new		
installations	2,339.41	
Light Bill - Fredericton Highway Bridge	676.56	
Cenotaph Light Bill	125.22	
Repairs to Cenotaph lights	86.13	
Miscellaneous (45 Gallons Oil in Carleton Ward transformer)	<u>39.26</u>	
	TOTAL	<u>\$ 46,998.29</u>

During the year 1961 various changes and extensions were made to the City of Fredericton Street Lighting System and are listed as follows:-

Additions:-

- 1 - 500 Watt Incandescent Unit - Regent St. between Aberdeen Street and Scully Street
- 14 - 500 Watt Incandescent Units - 3 on Shore Street; 2 on Grey Street; 4 on Winslow Street; 2 on Kensington Court and 3 on Lansdowne Street
- 14 - 4 ft. Fluorescent Units - Waterloo Row between Underpass and Back Drain; Lincoln Road between Targett's and Experimental Station, Canadian National Railway Crossing.
- 1 - 4 ft. Fluorescent Unit - 1st west of Canadian National Railway Crossing at Experimental Station
- 5 - 6 ft. Fluorescent Units - Canadian National Railway Underpass, corner Shore Street and Waterloo Row, Lansdowne Street and Waterloo Row, Grey Street and Waterloo Row and Alexandra Street and Waterloo Row
- 1 - 500 Watt Incandescent Unit - Carleton Street between Charlotte Street and Needham Street
- 5 - 500 Watt Incandescent Units, Sunshine Gardens (2 on Harewood Crescent, 2 on Sherwood Court and 1 on Elmwood Court)
- 4 - 200 Watt Incandescent Units - Smythe Street (1 between Montgomery Street and Priestman Street, 3 between Priestman Street and Trans-Canada Highway).
- 1 - 500 Watt Incandescent Unit on Smythe Street between Priestman Street and Trans-Canada Highway
- 1 - 500 Watt Incandescent Unit corner Montgomery Street and Windsor Street
- 2 - 200 Watt Incandescent Units on Windsor Street between Montgomery Street and Fenety Street
- 2 - 200 Watt Incandescent Units on Squires Street
- 2 - 200 Watt Incandescent Units on Birch Court
- 1 - 200 Watt Incandescent Unit corner Birch Court and Waggoner's Lane
- 3 - 500 Watt Incandescent Units, Sunshine Gardens (1 on Manor Court, 1 on Riverdale Court and 1 on Londale Court)
- 1 - 500 Watt Incandescent Unit corner Woodbridge and Leicester Streets
- 3 - 250 C.P.Lamps (1 on Aberdeen Street, 1 on Scully Street and 1 on Argyle Street)
- 1 - 250 C.P.Lamp on Dayton Court
- 1 - 250 C.P.Lamp on Byng Street

Removals:-

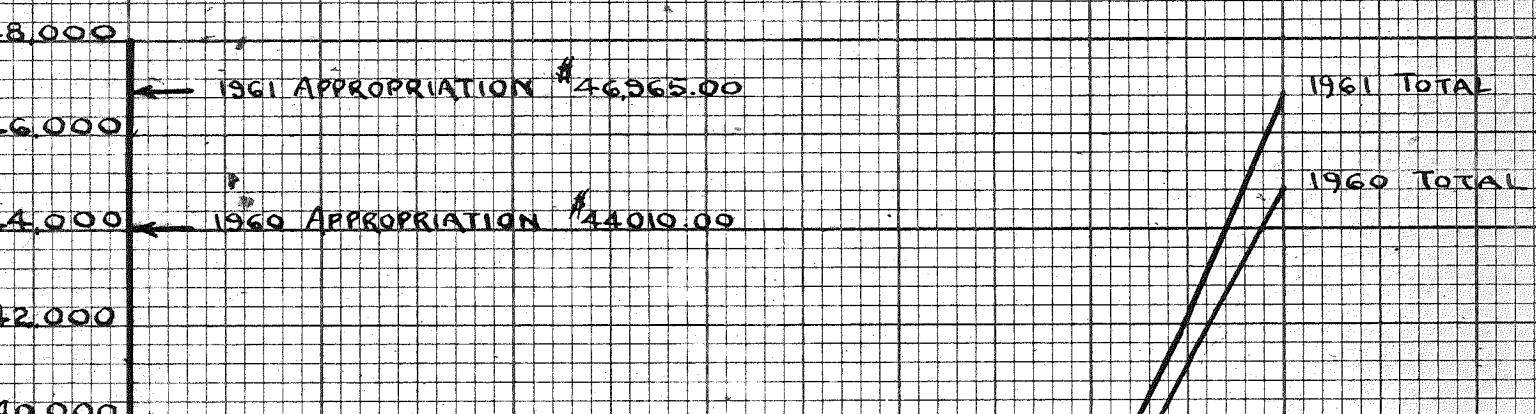
The 250 C.P.Series Lighting Unit (Lower Rear Circuit) from area east of University Avenue, also on Charlotte Street between University Avenue and Church Street, replaced with 500 Watt Multiples.

The total per capita charge for Street Lighting for 1961 population of 19,034 as per 1961 census is:-

$$\frac{46,835.74}{19,034} = \$2.41$$

TABLE SHOWING COMPARATIVE YEARLY COST IN
STREET LIGHTING

<u>Year</u>	<u>Total Yearly Cost</u>	<u>Yearly Appropriation</u>
1947	12,530.94	15,000.00
1948	15,269.12	15,000.00
1949	15,720.93	16,000.00
1950	25,300.30	20,000.00
1951	23,848.42	20,000.00
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	44,841.71	44,010.00
1961	46,835.74	46,965.00



WATER

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

1. During 1961 the south side of the Saint John River derived its water from three Gravel Wall Wells located in Wilmot Park, namely No. 1, No. 3 and No. 4. The construction of No. 4 Well was completed this year and water turned into the City Supply line on October 22, 1961 from Well No. 4.

No. 2 Well on Saunders Street cannot be used in its present state because of the prohibitive manganese content, which causes "Red" water and stains linen, etc. and is not acceptable as a Municipal supply. The electric power has been discontinued for the operation of this Well.

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 into open reservoirs or can be directed into the 1,000,000 I. G. Reservoir completed by Maritime Engineering Ltd. in 1959. Both of these Wells are used as standbys. The third Well is located on Bridge Street.

Chlorine has been added to the water in Carleton Ward since the reports from the City Analyst showed objectionable Coliforms in the water. A gas type chlorinator is in use at the Bridge Street Well.

The water costs for the City of Fredericton are divided into two headings:-

"WATER ORDINARY" and

" WATER PUMPING STATION "

WATER ORDINARY

This account takes in all expenditures, other than Capital Expenditure for water outside the Pumping Station and Pumping Station grounds and includes all current water expenditures in Carleton Ward. The expenditure under this heading is made up as follows:-

Gross Expenditure	\$ 75,054.16
Credits	<u>17,335.29</u>
Net Expenditure	\$ 57,718.87

The Credits are made up as follows:-

Work done for and materials sold to private parties when installing a water service over ground other than City property or when the material is to be used on parts of the system which do not belong to the City	\$ 7,676.37
City Spring Service Ltd. (198 feet 3/4" Copper)	85.14
Fredericton Housing Ltd. (1 - 1" Copper Union).....	1.25
Mr. S. Satter (Sale of 7,680 lbs. Scrap Iron)	76.80
W. J. Bearisto Co. Ltd. (1" Copper to 1" Iron Union)	1.46
Mr. Alfred Brown (Sale of 7,330# Scrap Iron)	73.30
Mr. Donald Leachman (3/4" Copper Fittings)	9.61
C. W. Ritchie (1-6" MJ-90° Bend; 12 feet-6" M. J. Pipe)	58.56
Fredericton Housing Ltd. (Rental on T6K Shovel)	7.80
All-State Insurance Co. (Repairs to hydrant broken by Mrs. McKay)	124.60
E. B. Billings Ltd. (Copper Fittings).....	39.56
Fredericton Exhibition Ltd. (1-1 $\frac{1}{4}$ " x 1" Galv. Elbow).	.98
W. H. Reynolds (Copper Fittings)	2.80
University of New Brunswick (Stand Pipe)	14.39
Crane Ltd. (Thawing Water Service)	28.22
University of New Brunswick (Thawing Water Service)..	13.47
Journal Voucher (Rental on Hydrants)	8,760.00
Journal Voucher (Material)	<u>360.98</u>
TOTAL	<u>\$17,335.29</u>

The Gross Expenditure is made up as follows:-

City Payroll for Hydrants	\$ 3,323.79
City Payroll for Meters	4,992.22
City Payroll for Water Ordinary	17,203.82
City Payroll for Carleton Ward Pumping Station	<u>610.42</u>
TOTAL PAYROLLS	\$ 26,130.25
Material and other charges	<u>48,923.91</u>
GROSS EXPENDITURE	<u>\$ 75,054.16</u>

No water extensions were laid under this heading, but they appear under "Capital Account Water."

A sprinkler system was installed in 1961 at Fredericton Tire Ltd. on MacLeod Avenue.

There are at present 58 Sprinkler Systems in the City. The City charge for water supplied for Sprinkler Systems is \$25.00 per year.

Hydrants:-

There are in the City, 378 hydrants, 277 hydrants on the south side of the Saint John River and 101 on the north side. The credit for rental charge on these hydrants appear under credits to Water Ordinary.

New hydrants this year were installed at the following locations:-

<u>Number</u>	<u>Location</u>
6	Skyline Acres
1	Indian Reserve, Carleton Ward
1	Titus Street, between Barker Street and Union Street
1	Birch Court
1	School Street, near Carleton Ward School
1	Windsor Street, between Fenety and Montgomery Street
2	Water Supply Line, College Hill Road to Canterbury Drive

In addition, a number of old hydrants were this year replaced with new McAvity hydrants. The location of these changes are as follows:-

- 1 Corner Regent Street and Aberdeen Street
- 1 Regent Street between C.N.R. and C.P.R. tracks
- 1 Corner Scully Street and St. John Street
- 1 Corner George Street and Allen Street
- 1 Corner Phoenix Square and Queen Street
- 1 Woodstock Road near R.C.M.P.

Meters:-

There are 4,029 water services in the City, 592 are charged under flat rate and 3,437 on meter rate.

The labor cost per meter for installing, reading, repairing, etc. is \$1.45 for 1961.

In 1961, 12 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. 158 Meters are read once a month, although they are billed twice a year. These are meters of customers who ordinarily have large consumptions and where a stopped meter or meter digit turned over without being noticed would mean considerable loss of revenue to the City. All meters on Military Buildings are included in this group of monthly meter readings.

Meters in storeroom, December 31, 1961 were:-

5/8" Meters - Repaired and fit for service	107
3/4" Meters - Repaired and fit for service	1
1" Meters - Repaired and fit for service	3
1½" Meters - Repaired and fit for service	8
2" Meters - Repaired and fit for service	2
5/8" Meters - To be reconditioned	15
New 5/8" Meters	53
New 1" Meters	2
New 2" Meters	1
New 4" Compound Meters	1

Distribution System:-

New services installed 1961	137
Old services relaid 1961	33
Old services repaired 1961	3
Frozen services that had to be thawed	41

The Fredericton distribution system consists of 49.84 miles of Water Main, made up of the following sizes:-

18" Main	0.98 miles
14" Main	0.33 miles
12" Main	3.94 miles
10" Main	3.74 miles
8" Main	9.40 miles
6" Main	25.94 miles
4" Main	5.24 miles
3" Main	0.27 miles

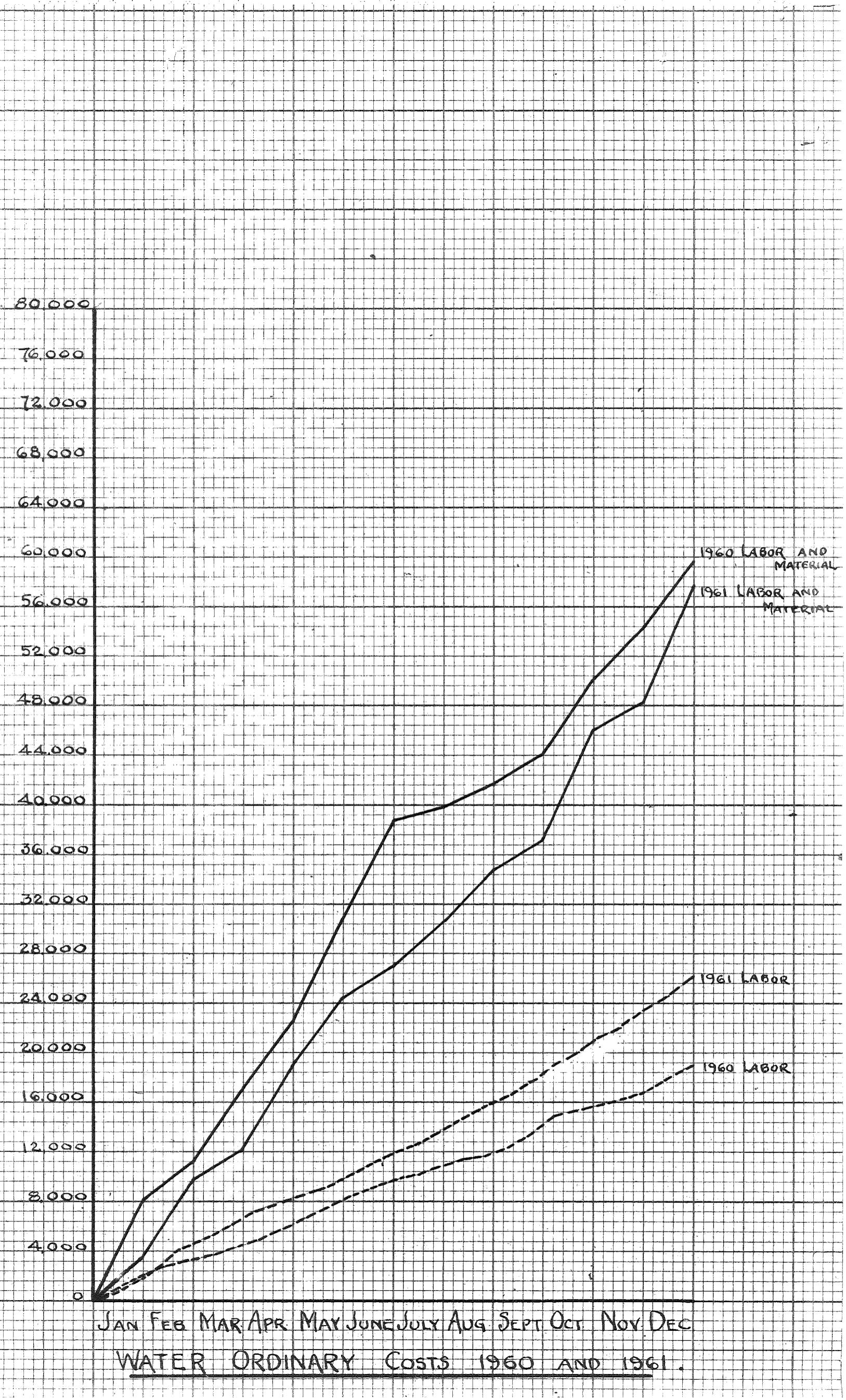
This does not include the water main installed by the National Defence at the Exhibition Grounds, Military Depot #7, now Department of Health and Social Welfare, Woodstock Road and the Army Garage, Waggoner's Lane.

The supply system consists of .36 miles of 14" Cast Iron Pipe, extending from the Well sites at Wilmot Park to the Pumping Station and .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 expenditures was the purchase of the following meters from Neptune Meters Ltd.: -

- 200 - 5/8" x 3/4" Trident, C.I.B. cold water meters, straight reading, imperial gallons, complete with couplings included.
- 2 - 3/4" Trident C.I.B. cold water meters, straight reading, imperial gallons, complete with couplings included.
- 9 - 1" Trident C.I.B., cold water meters, straight reading, imperial gallons, complete with flanges included.
- 3 - 2" Trident C.I.B. cold water meters, straight reading, imperial gallons, complete with flanges included.
- 2 - 4" Trident Compound cold water meters, straight reading, imperial gallons, complete with flanges included.

The number of meters installed in 1961 was 188.



Following is the list of vehicles used and charged to Water Ordinary, showing a comparison of repair charges for 1960 and 1961, including tires and tubes.

<u>Name of Vehicle</u>	<u>Year Purchased</u>	<u>Repairs 1960</u>	<u>Repairs 1961</u>
Dodge 1 Ton	1958	280.26	477.25
International $\frac{1}{2}$ Ton	1958	417.91	466.65
Chevrolet $\frac{1}{2}$ Ton	1959	66.42	33.85

Included in the expenditure under Water Ordinary was the purchase of 1-2074A Wheeler Hydraulic Pipe Cutters at a cost of \$484.22 and repairs to the Lincoln Road Diesel Pump including cylinder head, thermostat and gasket at a cost of \$484.62.

WATER PUMPING STATION

Gross Expenditure	\$ 45,081.88
Credits	<u>128.53</u>
Net Expenditure	<u>\$ 44,953.35</u>

The above credits are made up as follows:-

Mr. Frank Young (Sale of 2 Electric Motors - scrap) ..	\$ 100.00
Journal Voucher (Material)	<u>28.53</u>
TOTAL	<u>\$ 128.53</u>

The above expenditure is divided as follows:-

City Payrolls for salaries of employees at Pumping Station	\$ 20,089.60
Work done by other City employees in and around Pumping Station	<u>33.48</u>
TOTAL CITY PAYROLLS	\$ 20,123.08
Material and Workmen's Compensation charges	<u>24,958.80</u>
TOTAL	<u>\$ 45,081.88</u>

The material cost of \$24,958.80 is itemized as follows:-

Item 1 -	Light and Power supplied by Maritime Electric Co. (640,200 K.W. hours)....	\$ 12,140.07
Item 2 -	Light and Power supplied by Maritime Electric Co. at Wells in Park	7,183.20
Item 3 -	Heating (4513.8 Gallons Furnace Oil) ...	709.01
Item 4 -	Gasoline (200 Gallons)	47.30
Item 5 -	Liquid Chlorine (750 lbs.)	127.25
Item 6 -	Oil (1 Case HDX30 Mobile A)	115.57
	(45 Gallons Mobile A.F.)	
	(45 Gallons Esstic #43)	
Item 7 -	Maintenance and repair to buildings, machinery and intake pier	1,251.18
Item 8 -	New installations (Chemical Feeder tank)	173.00
Item 9 -	Supplies, Packing Rags, Lamps, etc.	158.71
Item 10 -	Stationary, Forms, Charts, Chemicals, Ink, etc.	489.21
Item 11 -	Workmen's Compensation	424.10
Item 12 -	E. W. Hagerman's (City Analyst) Salary :	1,510.08
Item 13 -	Lime	---
Item 14 -	Diesel Fuel (1,000 Gallons)	164.40
	Miscellaneous - Telephone, trucking, machinery, materials from other City Departments, Uniforms, etc. ...	<u>465.72</u>
	TOTAL	<u>\$ 24,958.80</u>

Included in the above expenditure were the following:-

1. Painted floor of Oil Engine Room
2. Painted pumps in Pump Room
3. Painted pumps and floors at Wells No. 1, No. 3 and No. 4
4. Painted Aerators
5. Improved rear entrance to Pumping Station
6. Repaired east side of building damaged by a motor vehicle
7. Installed fluorescent light over 100 H. P. Motor

The Pumping Station plant at the present time has Well No. 1 and Well No. 3 operating automatically on demand and in 1962 Well No. 4 will also operate automatically. The Saint John River supply operates manually and the supply must pass through the Filter plant for purification. This supply will only be used in an emergency, that is, when the Wells are not operating due to failure, etc. or when the demand for water is higher than the Wells can produce or during a prolonged electrical interruption, probably longer than 24 hours.

During a 24-hour interruption, the 2,000,000 Gallon Reservoir will supply the system unless there is a serious break or a fire where 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>Water Pumped Imperial Gallons</u>	<u>Gross Expenditure at Pumping Station</u>	<u>Pumping Station cost per 1,000 Gallons Gross Expenditure</u>
1943	280,115,000	26,338.50	9.4 cents
1944	295,945,000	22,926.61	7.7 cents
1945	321,355,000	23,900.14	7.7 cents
1946	338,979,000	25,640.43	7.5 cents
1947	319,243,000	37,123.42	11.6 cents
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	35,058.57	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

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

By taking the average consumption of Carleton Ward as 300,000 Gallons per day, the estimated water pumped for 12 months from these Wells was 109,500,000 Imperial Gallons.

The total amount of water pumped from January 1, 1961 to December 31, 1961, therefore, for the whole City is 619,750,000 Imperial Gallons.

The total net water expenditure for the City from January 1, 1961 to December 31, 1961 is \$102,672.22.

Therefore, the net cost to pump and deliver to the customer, 1,000 Imperial Gallons of Water from January 1, 1961 to December 31, 1961 is 102,672.22 = 16.6 cents.
619,750

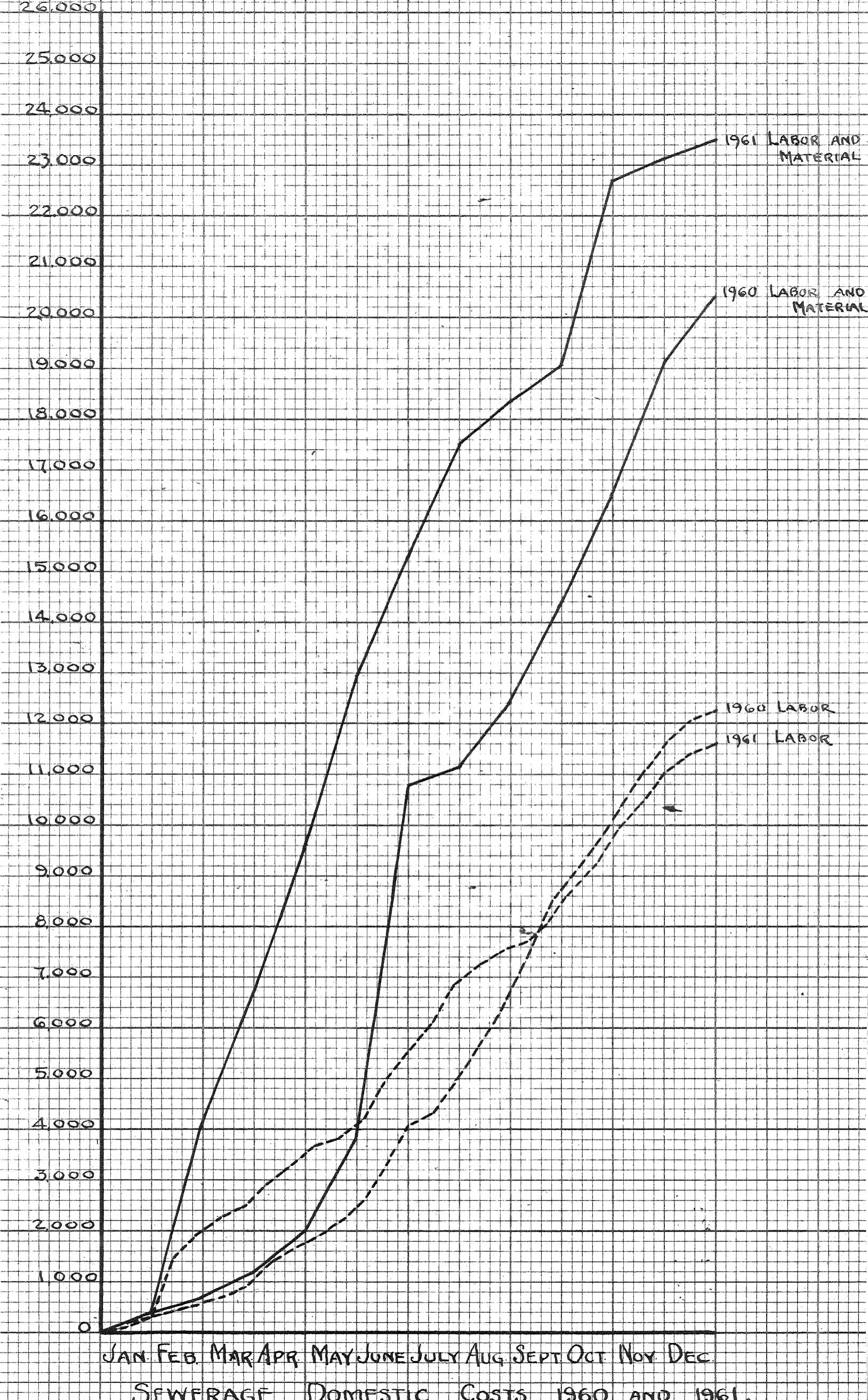
All the preceding costs shown under "Water Pumping Station" and "Water Ordinary" do not include the cost of billing and collecting water bills or any other overhead charge included in the City Government cost, nor do they include bond payment or sinking fund charges.

The Water Pumping Station was under the supervision of the 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, 1961 to December 31, 1961.

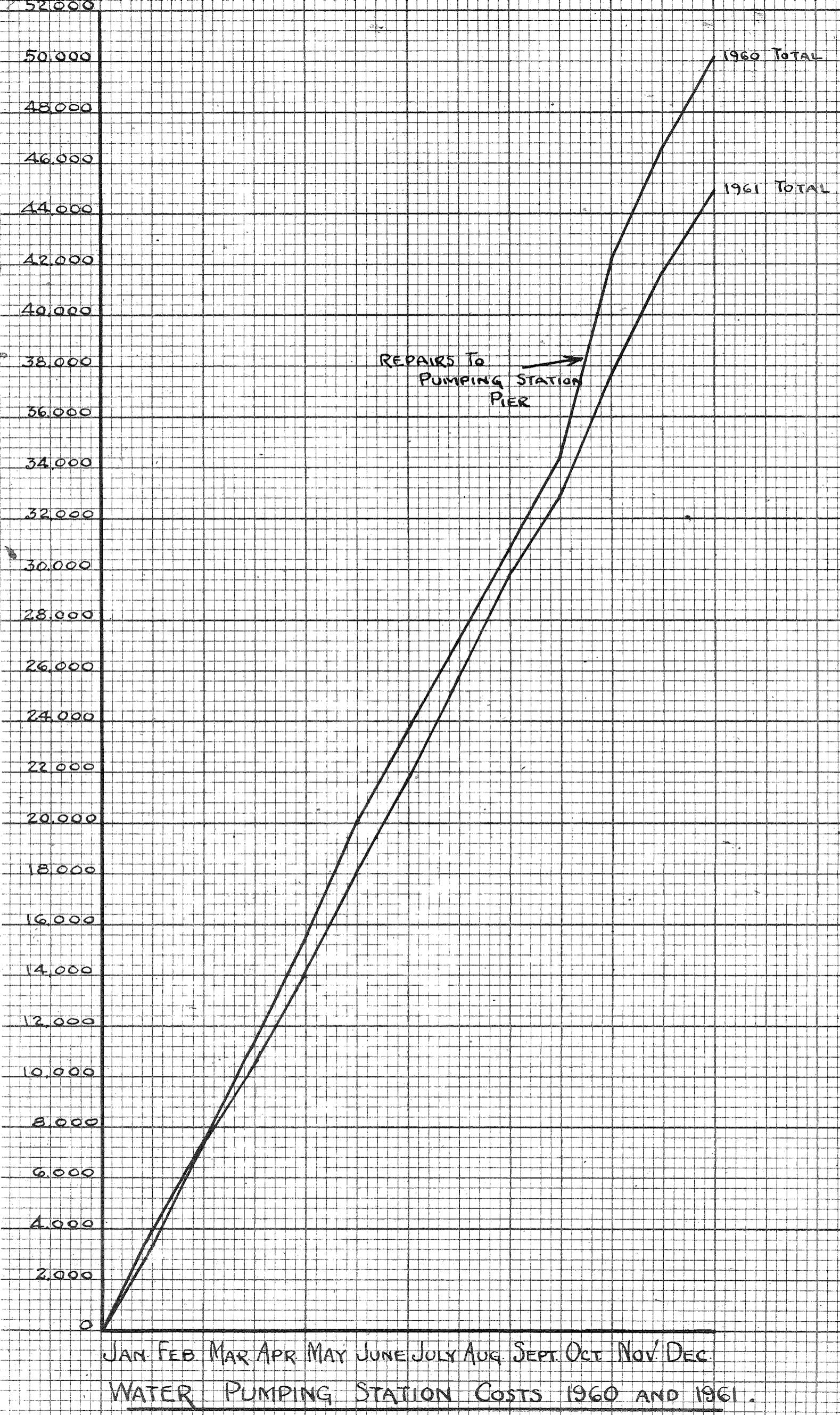
Respectfully submitted,

W. L. Barrett
City Engineer.



JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC

SEWERAGE DOMESTIC COSTS 1960 AND 1961.



FREDERICTON WATER SUPPLY

Year 1961 January 1st to December 31st

The water supply for Fredericton is now available from six Wells, three on the north and three on the south side of the St. John River. Throughout 1961 the greater part of the water for Carleton Ward, that is north of the river, came from the Bridge Street Well, the remainder from the old Killarney and Range Wells. On the south side all the water came from number 1 and number 3 Wells until October 22nd, when a new supply became available in number 4 Well. All three Wells are in Wilmot Park. From the 22nd on, a mixture of these three Wells flowed into the city mains.

No filtered river water was admitted to the system at any time although the old filter plant is kept in readiness and could be put into operation in case of emergency.

Few, if any cities, have water of a quality equal to the Fredericton supply. Its total hardness varies around 90 parts per million for old Fredericton and 118 parts in Carleton Ward. Some consider it a hard water but classed with other waters used by cities of North America it is comparatively soft. The American Waterworks Association of America says in its Manual of Water Quality and Treatment, "Water with a total hardness of 70 to 100 parts per million is considered entirely satisfactory for general consumption and is frequently preferred to an absolutely soft water."

Both supplies are cold and clear throughout the year and are generally of pleasing taste. Occasionally complaints are received, specifying chlorine tastes. Many of the medicinal tastes attributed to chlorine may be residual syndets that have not been properly rinsed from dishes. They are very tenacious and require several rinses for complete removal from a surface. The Hospital occasionally reports chlorine flavours. This may be possible as it is only a few hundred feet away from where the chlorine is applied to the water. On the other hand water taken from the faucet in the Pumping Station, not more than 150 feet from the point of chlorine application, never tastes of it. Many have been drinking from this source since 1955 and the writer has never in that time heard any remark other than, "that's good water." The same complaints and compliments apply to the Carleton Ward supply.

Occasional slugs of dirty water, in sections of either systems, may be caused by opening and shutting valves or by breaks in mains. "Hale", in the Journal of the American Water Works Association 1935, noted that upward adjustment of pH loosens rust in old pipes. The pH in the mains as of now is 7.2 whereas the alum flocculated river water varied around 6.2.

The water is almost sterile as it comes from the Wells but unfortunately must flow many miles through pipes before it reaches some of the consumers. These pipes are, in many cases, in the same trench as the sewer pipes which may

leak or break. For protection in case of breaks in the water line health authorities prefer some chlorine in the water even though extra chlorine treatment is given to the pipes when repairing the break.

The average amount of chlorine added for 1961 was 0.11 parts per million (written ppm). Of this 0.01 ppm combined with constituents in the water, leaving 0.1 ppm of free Chlorine for sterilizing purposes. These figures are for south of the River with Carleton Ward approximately the same.

Continuous chlorination and the covered reservoir (one million gallon capacity) has solved the bacteriological problem for Carleton Ward. Before these features were added to the system occasional positive tests were encountered but in 1961 only one sample was positive. This is a duplication of 1960 figures, two successive years of excellent results. Since continuous chlorination and the covered reservoir were put into service in the summer of 1960 it is logical to credit the improvement in water quality to these two very important additions.

It might be of interest to mention here that the town of Keen, New Hampshire, U.S.A. has just finished paying \$67,000.00 damages (could have been \$500,000.00 if it had gone to court, in the opinion of some solicitors). This sum was paid thirty victims who contracted typhoid fever from drinking the Town water which was not chlorinated.

Tests were made on 66 samples for the presence of the Coliform group of bacteria. Because this group is present in sewage and because it is easy to detect its presence in potable water is used as a quantitative indicator of pollution.

Following is a brief of the United States Treasury Standards, as applicable to Fredericton, which will explain test procedures.

1. A sample consists of 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 confirmatory media 2% Brilliant Green Bile shall be used in the confirmatory test.

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 per month may have 3 positive portions out of the 5 portions making up the sample.
3. The procedure given, using a standard sample composed of portions, provides for an estimation of the most probable number (MPN) of coliform bacteria per 100 cc. present in the sample as set forth in the following table.

<u>Number of Portions (Total of 5)</u>		<u>Most Probable Number of Coliform bacteria per 100 cc. of Sample</u>				
Negative	Positive	When 5 - 10 cc. portions are examined				
5	0	Less than	2.2	per	100	
4	1		2.2	per	100	
3	2		5.1	per	100	
2	3		9.2	per	100	
1	4		16.0	per	100	
0	5	More than	16	per	100	

Figures from this table do not mean too much when applied to a single sample but give results nearer the truth when applied to the average of several samples taken from a sampling station.

It will be seen that one positive sample of July 28th was checked as soon as the result was obtained (48 hours) by another taken a short distance further along the pipe line. This proved to be negative as have all others taken at these two points.

A list of sampling stations is attached.

(Signed) E. W. Hagerman
February 3, 1962. City Analyst.

<u>Date of Sample</u>	<u>Origin of Sample</u>	Positive reactions only will be recorded <u>All others Negative</u>
January 6	U.N.B. Engineering Bldg.	
January 11	107 Alexandra Street	
January 18	MacLaren Ave., Fire Station	
January 25	Greer & Lawson, 377 Gibson St.	
February 5	154 Aberdeen Street	Medicinal tastes reported
February 10	U.N.B. Engineering Bldg.	
February 17	154 Aberdeen Street	
February 21	MacLaren Avenue, Fire Station	
February 25	99 Smith St. (North Devon)	Some bacterial growth but no Coliforms
March 3	127 Charlotte Street	
March 11	277 Gibson Street	
March 16	U.N.B. Engineering Bldg.	
March 21	99 Smith Street	Some growth, No coliforms
March 28	R.A.Malloy, 66 McKeen St.	
April 4	99 Smith Street	Non Coliform growth lighter
April 6	99 Smith Street	Non Coliform growth light
April 13	99 Smith Street	Growth absent
April 17	277 Gibson Street	
April 22	99 Smith Street	
May 2	Greer and Lawson, 377 Gibson St.	
May 3	Thistle Diary Well (private)	Bad smell in water reported. No coliforms developed
May 9	99 Smith Street	
May 15	Greer and Lawson, 377 Gibson St.	
May 19	Albert Seymour (Killarney Road)	
May 24	99 Smith Street	
May 29	Greer and Lawson, 377 Gibson St.	
May 30	99 Smith Street	
June 5	Greer and Lawson, 377 Gibson St.	
June 8	99 Smith Street	
June 14	Greer and Lawson, 377 Gibson St.	
June 21	Greer and Lawson, 377 Gibson St.	
June 26	Edinburgh St. (near break in main)	
July 5	99 Smith Street	
July 12	Greer and Lawson, 377 Gibson St.	
July 24	U.N.B. Engineering Bldg.	
July 28	277 Gibson Street	1 Positive 4 Negative
July 31	Greer and Lawson, 377 Gibson St.	
August 12	MacLaren Ave., Fire Station	
August 16	R.A.Malloy, 66 McKeen Street	
August 21	R.A.Malloy, 66 McKeen Street	
August 21	277 Gibson Street	
August 26	127 Charlotte Street	

Sept. 3	277 Gibson Street	
Sept. 6	66 McKeen Street	
Sept. 10	Upper Graveyard, Woodstock Road	
Sept. 15	U.N.B. Engineering Bldg.	
Sept. 20	66 McKeen Street	
Sept. 27	Greer and Lawson, 377 Gibson St.	
October 1	154 Aberdeen Street	
October 6	Greer and Lawson, 377 Gibson St.	
October 10	U.N.B. Engineering Bldg.	
October 13	99 Smith Street	
October 20	Greer and Lawson, 377 Gibson St.	
October 25	Beaverbrook Hotel	
November 2	Upper house, Birch Court	Some growths, No coliform - new main
November 7	U.N.B. Engineering Bldg.	
November 12	127 Charlotte Street	
November 20	99 Smith Street	
November 24	Greer and Lawson, 377 Gibson St.	
December 1	154 Aberdeen Street	
December 5	U.N.B. Engineering Bldg.	
December 11	MacLaren Avenue	
December 17	U.N.B. Engineering Bldg.	
December 22	Greer and Lawson, 377 Gibson St.	
December 26	127 Charlotte Street	
December 30	656 Mitchell Street	Some growth, No coliform - broken main

WATER INSTALLATIONS 1961.

<u>Date</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>SIZE</u>	<u>TYPE</u>
Feb. 26	George Boldon	324 Victoria St.	5/8" C. op.	Nelay
March 4	F'ton Housing Ltd.	544 Brunswick St.	3/4" C.	Relay
March 21	Mrs. Percy Graham Est.	427-429 Union St.	3/4" C.	Relay
Apr. 5	J. Barry	Regent St.	5/8" C.	Repaired
Apr. 19	Charles Wood	555 Regent St. <i>Union ST.</i>	1" C.	New
Apr. 19	Suburban Con. Co. (Lot 171)	Inglewood Drive	5/8" C.	New
Apr. 26	F'ton Exhibition Ltd.	Horse Barn	1" C.	New
May 1	F'ton Tire Ltd.	623 McLeod Ave.	6" C. I.	Sprinkler
May 3	Indian Affairs Branch (School)	Union St.	5/8" C.	Repaired
May 18	Robinson Harvey	161 Pine St.	5/8" C.	Relay
May 23	Russell E. Gourley	470 Water St.	5/8" C.	Repaired
May 25	David Caughey	347 St. Jogn St.	5/8" C.	Relay
May 30	Dr. F. E. MacDiarmid	316 George St.	5/8" C.	Relay
June 5	Fred Blair	226 Odell Ave.	5/8" C.	Relay
May 25	Hill Bros.	Sherwood Court	5/8" C.	New
May 26	Hill Bros.	Fenety & Windsor Sts.	5/8" C.	New
May 16	Diamond Con. Co. (Medical Clinic)	Rookwood Ave.	4" C. I.	New
May 25	Hubert Lovely	198 Montgomery St.	5/8" C.	New
June 3	Suburban Con. Co. (Lot 35)	Squires St.	5/8" C.	New
June 5	Dr. A. McAndrew (Lot 8)	Windsor St.	5/8" C.	New
June 7	Malcolm Cummings (Lot 43)	Windsor St.	5/8" C.	New
June 8	Wendall Farris (Lot 48)	Windsor St.	5/8" C.	New
June 9	Eldon Dunphy (Lot 46)	Windsor St.	5/8" C.	New
June 9	Rudolph Hanusick	766 Windsor St.	5/8" C.	New
June 12	John C. Flynn	Irvine St.	5/8" C.	New
June 14	Frank Little	Smythe St.	3/4" C.	New
June 15	Malcolm Cummings (Lot 6)	Kings College Road	5/8" C.	New
June 15	Hill Bros. (Lot 6)	Albert St.	5/8" C.	New
June 26	Archie Fox (Lot 4)	Montgomery St.	5/8" C.	New
June 27	Robert Calhoun (Lot 3)	Montgomery St.	5/8" C.	New
June 27	Malcolm Cummings (Lot 6)	Montgomery St.	5/8" C.	New
J,"ne 28	Lester B. Bartlett	Montgomery St.	5/8" C.	New
June 30	W. Danna Wasson (Lot 32)	Windsor St.	5/8" C.	New
July 24	Miss Nellie Ramey	635 King St.	3/4" C.	Relay
July 4	Donald Rogers & Mrs W. DeSaulnier	82 Wagoner Lane	5/8" C.	New
July 4	Capital Graden Restaurant	558 Queen St.	1½" C.	New
July 12	Hazen Bennett	Park St.	5/8" C.	New
July 4	G. B. Thompson (Lot 38)	Edinburgh St.	3/4" C.	New
July 5	F'ton Housing Ltd. (Lot 33)	Squires St.	5/8" C.	New
July 6	F'ton Housing Ltd. (Lot 34)	Squires St.	5/8" C.	New
July 6	F'Ton Housing Ltd. (Lot 24)	Squires St.	5/8" C.	New
July 7	F'ton Housing Ltd. (Lot 25)	Squires St.	5/8" C.	New
July 7	F'Ton Housing Ltd. (Lot 26)	Squires St.	5/8" C.	New
July 10	F'ton Housing Ltd. (Lot 27)	Squires St.	5/8" C.	New
July 11	F'ton Housing Ltd. (Lot 36)	Squires St.	5/8" C.	New
July 13	Malcolm Cummings (Lot 14)	Irvine St.	5/8" C.	New
July 13	Jasper Wey	Friel St.	5/8" C.	New
July 20	L. H. Colwell	704 Charlotte St.	5/8" C.	Relay
July 20	Eldon Dunphy (Lot 4)	Montgomery St.	5/8" C.	New
July 19	M. K. Holman	Montgomery St.	5/8" C.	New
July 21	Irving Oil Col Ltd.	Lincoln Road	1" C.	New
July 20	F'ton Housing Ltd. (Lot 1)	Reid St.	5/8" C.	New
July 25	J. E. A. Lindon	Dayton Court	5/8" C.	New
July 25	J. L. Simms & Sons Ltd.	Brunswick & Smythe Sts	1" C.	New
July 26	Wendall Farris (Lot 4)	Squires St.	5/8" C.	New
July 27	Shell Oil Co.	Smythe St.	1" C. NEW	New
July 27	Brian C. Carter (Lot 5)	Squires St.	5/8" C.	New
July 28	Bailey & Steen (Lot C0)	Birch Court	5/8" C.	New
Aug. 2	J. H. Rodolph	223 Brunswick St.	3/4" C.	New
	Maritime Dairies Bldg.	Campbell St.	1" C.	New
Aug. 1	D. C. Campbell	Montgomery St.	1" C.	New
Aug. 3	Malcolm Cummings (Lot 132)	Sherwood Court	5/8" C.	New
Aug. 7	G. C. Elgee	Windsor & Valleyview Sts	5/8" C.	New
Aug. 8	James London (Lot 51)	Smythe St.	5/8" C.	New
Aug. 3	S. E. R. Construction	232 Rockwood Ave.	2--1" C.	New
Aug. 12	Mrs. Helen Gilbert	299 Highland Ave.	5/8" C.	New
Aug. 16	Suburban Con. Co. (Lot 15)	York St.	5/8" C.	New
Aug. 17	Suburban Con Co. (Lot 16)	York St.	5/8" C.	New
Aug. 18	Vernon G. Greene (Lot 5)	Montgomery St.	5/8" C.	New
Aug. 18	D. C. Campbell	York & Montgomery Sts.	5/8" C.	New

Aug. 22	Clarence Sweeney	693 Union St.	5/8"	Cop.	Relay
Aug. 25	George Chippin	569 Brunswick St.	3/4"	C.	Relay
Aug. 25	Arthur McKenzie	230 Victoria St.	5/8"	C.	Relay
Aug. 29	Mrs. Byron Cookson	317 York St.	5/8"	C.	Relay
Sept. 8	Irving Oil Co. Ltd.	952 Union St.	3/4"	C.	Relay
Aug.	Atlas Con. Co.	Y. M. C. A.			Relocate Main
Sept. 12	Central Trust Co.	168 Pine St.	5/8"	C.	Relay
Sept. 1	F'ton Housing Ltd. (Lot 8)	Chelsea Court	5/8"	C.	New
Sept. 2	F'ton Housing Ltd. (Lot 7)	Chelsea Court	5/8"	C.	New
Sep't. 5	F'ton Housing Ltd. (Lot 9)	Chelsea Court	5/8"	C.	New
Sept. 6	F'ton Housing Ltd. (Lot 10)	Chelsea Court	5/8"	C.	New
Sept. 7	F'ton Housing Ltd. (Lot 51)	Chelsea Court	5/8"	C.	New
Sept. 8	F'ton Housing Ltd. (Lot 11)	Chelsea Court	5/8"	C.	New
Sep't. 9	F'ton Housing Ltd. (Lot 53)	Chelsea Court	5/8"	C.	New
Sept. 12	F'ton Housing Ltd. (Lot 54)	Chelsea Court	5/8"	C.	New
Sept. 13	Francis Corbett (Lot 5)	Canterbury Drive	5/8"	C.	New
Sept. 12	W. H. Reynolds & Son	Exhibition House	5/8"	C.	New
Sept. 12	Kenneth Dunn	Irvine St.	5/8"	C.	New
Sept. 13	Wendall Farris (Lot 9)	Squires St.	5/8"	C.	New
Sept. 14	Kenneth Bartlett (Lot 31)	Squires St.	5/8"	C.	New
Sept. 17	F'ton Housing Ltd. (Lot 52)	Chelsea Court	5/8"	C.	New
Sept. 18	F'ton Housing Ltd. (Lot 55)	Chelsea Court	5/8"	C.	New
Sep't. 19	F'ton Housing Ltd. (LOT 4)	Canterbury Drive	5/8"	C.	New
Sep't. 16	Suburban Con. Co. (Lot 165)	Inglewood Drive	5/8"	C.	New
Sep't. 19	Suburban Con. Co. (Lot 149)	Harewood Court	5/8"	C.	New
Sep't. 19	Suburban Con. Co. (Lot 168)	Inglewood Drive	5/8"	C.	New
Sept. 20	L. S. Evans (Lot 51)	Windsor St.	5/8"	C.	New
Sept. 20	Donald Flynn (Lot 3)	Montgomery St.	5/8"	C.	New
Sept. 20	Mrs. Shirley Hickey	120 Victoria St.	5/8"	C.	New
Sept. 21	Thomas Gough	90-92 McKeen St.	5/8"	C.	Relay
Sept. 21	Mrs. Walter Crouse	247 Victoria St.	5/8"	C.	Relay
Sept. 20	F'ton Housing Ltd. (Lot 3)	Canterbury Drive	5/8"	C.	New
Sept. 21	F'ton Housing Ltd. (Lot 15)	LEICESTER STREET Brighton Court	5/8"	B.	New
Sept. 22	F'ton Housing Ltd. (Lot 29)	Leicester St.	5/8"	C.	New
Sept. 25	F'ton Housing Ltd. (Lot 25)	Sheffield Court	5/8"	C.	New
Sept. 22	Donald Manzer (Lot 11)	Edinburgh St.	5/8"	C.	New
Sept. 27	F'ton Housing Ltd. (Lot 26)	Sheffield Court	5/8"	C.	New
Sep't. 28	F'ton Housing Ltd. (Lot 31)	Leicester St.	5/8"	C.	New
Sept. 29	F'ton Housing Ltd. (Lot 32)	Leicester St.	5/8"	C.	New
Sept. 27	F'ton Housing Ltd. (Lot 36)	Brighton Court	5/8"	C.	New
Sept. 30	F'ton Housing Ltd. (Lot 12)	Leicester St.	5/8"	C.	New
Sept. 30	F'ton Housing Ltd. (Lot 30)	Brighton Court	5/8"	C.	New
Oct. 4	Walter Beairste (K.P.Hall)	Carleton St.	3/4"	C.	New
Oct. 6	John J. Malloy	495 Needham St.	5/8"	C.	Relay
Sept. 26	Elsie J. Murray (Lot 22)	Edinburgh St.	5/8"	C.	New
Sept. 29	Diamond Con. Co. (St. Annes Church)	Westmorland St.			New
Oct. 3	F. B. Gibson (Lot 33)	KINGS COLLEGE ROAD	5/8"	C.	New
Oct. 11	Bailey & Steen (Lot B)	Birch Court	5/8"	C.	New
Oct. 12	Clive Sutton (Lot A)	Birch Court	5/8"	C.	New
Oct. 12	Windsor Hotel Ltd.	Westmoreland St.	1"	C.	Relay
Oct. 13	Ada M. Allen	856 George St.	5/8"	C.	Relay
Oct. 17	Mrs. Winnifred Butland	528 Aberdeen St.	5/8"	C.	Relay
Oct. 2	F'ton Housing Ltd. (Lot 39)	Brighton Court	5/8"	C.	New
Oct. 2	F'ton Housing Ltd. (Lot 33)	Brighton Court	5/8"	C.	New
Oct. 3	F'ton Housing Ltd. (Lot 13)	Leicester St.	5/8"	C.	New
Oct. 4	F'Ton Housing Ltd. (Lot 2)	Canterbury Drive	5/8"	C.	New
Oct. 5	F'ton Housing Ltd. (Lot 1)	Canterbury Drive	5/8"	C.	New
Oct. 20	Windsor Hotel Ltd.	Church St.	1"	C.	Relay
Oct. 2	F'ton Housing Ltd. (Lot 23)	Squires St.	5/8"	C.	New
Oct. 2	F'ton Housing Ltd. (Lot 22)	Squires St.	5/82	C.	New
Oct. 2	F'ton Housing Ltd. (Lot 35)	Brighton Court	5/8"	C.	New
Oct. 11	F'ton Housing Ltd. (Lot 30)	Leicester St.	5/8"	C.	New
Oct. 12	F'ton Housing Ltd. (Lot 28)	Sheffield Court	5/8"	C.	New
Oct. 19	Hill Bros. (Lot 2)	Montgomery St.	5/8"	C.	New
Oct. 19	R. G. McCullough (Lot 32)	Squires St.	5/8"	C.	New
Oct. 19	Matthews Plumbing (Y.M.C.A.)	Saunders St.	4"	C. I.	New
Oct. 20	Miss Eleanor Clarkson (Lot 10)	Valleyview St.	5/8"	C.	New
Oct. 23	Scott Clarkson (Lot 9)	Valleyview St.	5/8"	C.	New
Oct. 24	Malcolm Cummings (Lot 43)	Windsor St.	5/8"	C.	New
Oct. 26	Mrs. Annie Thomas	158 Pine St.	5/8"	C.	Relay

Nov. 6	E. E. Burden	485 Charlotte St.	3/4" Cop.	Relay
Nov. 9	Ernest Chase	146 Dobie St.	3/4" C.	Relay
Oct. 25	George Howes	Dundonald St.	3/4" C.	New
Oct. 26	Hill Bros. (Lot 186)	Inglewood Drive	3/4" C.	New
Oct. 27	W. W. WAite	637 Forest Hill	5/8" C.	New
Nov. 9	Diamond Con. Co. (Sobeys)	Beaverbrook Court	1" C.	New
Oct. 31	Mrs. Queenie Taylor	98 Jaffrey St.	5/8" C.	New
Nov. 13	Roy Taylor	161 Neill St.	5/8" C.	Relay
Nov. 14	Frank McGinley	540 Union St.	5/8" C.	Relay
Nov. 23	M. B. Hogan	50 Waterloo Row	3/4" C.	Relay
Nov. 20	F'ton Housing Ltd. (Lot 6)	Canterbury Drive	5/8" C.	New
Nov. 23	Hill Bros (Lot 166)	Inglewood Drive	5/8" C.	New
Nov. 24	David M. Hurley	Turnbull Court	5/8" C.	New
Nov. 24	Malcolm Cummings (Lot 9)	York St.	5/8" C.	New
Nov. 27	L. W. Shemilt (Lot 4)	Spruce Terrace	5/8" C.	New
Nov. 22	J. C. Risteen Co. Ltd.	Wueen St.	3/4" C.	New
Nov. 29	Municipality of York	668 Brunswick St.	1" C.	Relay
Dec. 1	Irvine Graft	301 Charlotte St.	5/8" C.	Relay
Dec. 1	Dr. Ella D. Good	242 Regent St.	3/4" C.	Relay
Nov. 10	Wendall Farris (Lot 13)	York St.	5/8" C.	New
Nov. 30	Gordon L. Christensen (Lot 73)	Montgomery St.	5/8" C.	New
Nov. 30	Wendell Farris (Lot 14)	York St.	5/8" C.	New
Nov. 14	Carl Hay	232 Forest Acres Court	5/8" C.	New
Nov. 30	Indian Affairs (Blk 2, Lot 1)	Indian Reserve	5/8" C.	New
Dec. 5	Indian Affairs (Blk 4, Lot 5)	Indian Reserve	5/8" C.	New
Dec. 1	Indian Affairs (Blk 6, Lot 1)	Indian Reserve	5/8" C.	New
Dec. 4	Indian Affairs (Blk 4, Lot 2)	Indian Reserve	5/8" C.	New
Dec. 1	Indian Affairs (Blk 4, Lot 1)	Indian Reserve	5/8" C.	New
Nov. 30	Indian Affairs (Blk 1, Lot 20)	Indian Réserve	5/8" C.	New
Dec. 8	Edward Dunbar	150 St. Marys St.	5/8" C.	Relay
Dec. 20	Paradise Restaurant	584 Queen St.	5/8" C.	Relay
Dec. 5	Suburban Con. Co. (Lot 157)	Harewood Court	5/8" C.	New
Dec. 6	Eldon Dunphy (Lot 7)	Moigtgomery St.	5/8" C.	New
Dec. 7	Suburban Con. Co. (Lot 152)	Harewood Court	5/8" C.	New
Dec. 7	Suburban Con. Co. (Lot 169)	Inglewood Drive	5/8" C.	New

DOMESTIC SEWER INSTALLATIONS 1961.

<u>DATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>TYPE</u>
Apr. 19	Suburban Con. Co. (Lot 171)	Inglewood Drive	New
May 1	Capital Winter Club	Rockwood Ave.	Relocated
May 25	Hill Bros.	Sherwood Court	New
May 26	Hill Bros.	Fenety & Windsor Sts.	New
May 25	Hubert Lovely	198 Montgomery St.	New
June 3	Suburban Con. Co. (Lot 35)	Squires St.	New
June 5	Dr. A. McAndrew (Lot 3)	Windsor St.	New
June 7	Malcolm Cummings (Lot 43)	Windsor St.	New
June 8	Wendall Farris (Lot 48)	Windsor St.	New
June 9	Eldon Dunphy (Lot 46)	Windsor St.	New
June 9	Rudolph Hanusick	766 Windsor St.	New
June 12	John C? Flynn	Irvine St.	New
June 14	Frank Little	Smythe St.	New
June 15	Malcolm Cummings (Lot 6)	Kings College Road	New
June 15	Hill Bros. (Lot 60)	Albert Street	New
June 26	Archie Fox (Lot 4)	Montgomery St.	New
June 27	Robert Calhoun (Lot 3)	Montgomery St.	New
June 27	Malcolm Cummings (Lot 6)	Montgomery St.	New
June 28	Lester B. Bartlett	Montgomery St.	New
June 30	W. Danna Wasson (Lot 32)	Windser St.	New
July 4	D. Rogers & Mrs. W. DeSaulnier	82 Wagoner Lane	New
July 12	Hazen Bennett	Park St.	New
July 4	G. B. Thompson (Lot 38)	Edinburgh St.	New
July 5	F'ton Housing Ltd. (Lot 33)	Squires St.	New
July 6	F'ton Housing Ltd. (Lot 34)	Squires St.	New
July 6	F'ton Housing Ltd. (Lot 24)	Squires St.	New
July 7	F'ton Housing Ltd. (Lot 25)	Squires St.	New
July 7	F'ton Housing Ltd. (Lot 26)	Squires St.	New
July 10	Fton Housing Ltd. (Lot 27)	Squires St.	New
July 11	Fton Housing Ltd. (Lot 36)	Squires St.	New
July 13	Malwolm Cummings (Lot 14)	Squires St.	New
July 13	Jasper Way	Friel St.	New
July 20	Eldon Dunphy (Lot 4)	Montgomery St.	New
July 19	M. K. Holman	Montgomery St.	New
July 20	Fton Housing Ltd. (Lot 1)	Reid St.	New
July 25	J. E. A. Lindon	Dayton Court	New
July 25	John J. O'Connor	475 Gibson St.	New
July 25	J. L. Simms & Sons Ltd.	Smythe St.	New
July 26	Wendall Farris (Lot 4)	Squires St.	New
July 27	Shell Oil Co. Ltd.,	Smythe St.	New
July 27	Brian C. Carter (Lot 5)	Squires St.	New
July 28	Bailey & Steen (Lot C)	Birch Court	New
Aug. 1	D. C. Campbell	Montgomery St.	New
Aug. 3	Malcolm Cummings (lot 132)	Sherwood Court	New
Aug. 7	G. C. Elgee	Windsor & Valleyview Sts.	New
Aug. 8	James London (Lot 51)	Smythe St.	New
Aug. 9	Percy McCoombs	Union St.	New
Aug. 3	S. C. R. Construction Co.	232 Rockwood Ave.	New
Aug. 14	S. C. R. Construction Co.	232 Rockwood Ave	Storm Sewer
Aug. 12	Thistle Dairy Ltd.	Union & Bridge	Storm Sewer
Aug. 12	Mrs. Helen Gilbert	299 Highland Ave	New
Aug. 16	Suburban Con. Co. (lot 15)	Yerk St.	New
Aug. 17	Suburban Con. Co. (Lot 16)	Yerk St.	New
Aug. 18	Vernon C. Greene (LOT 5)	Montgomery St.	New
Aug. 18	D. C. Campbell	Yerk & Montgomery Sts.	New
Aug.	Fton High School	George St.	Storm Sewer
Aug.	Atlas Con. Co. (Y. M. C. A.)	Saunders St.	Relocate
Sept. 1	Fton Housing Ltd. (Lot 8)	Chelsea Court	New
Sept. 2	Fton Housing Ltd. (Lot 7)	Chelsea Court	4" Transite
Sept. 5	Fton Housing Ltd. (Lot 9)	Chelsea Court	4" Transite
Sep(t. 6	Fton Housing Ltd. (Lot 10)	Chelsea Court	4" Transite
Sept. 7	Fton Housing Ltd. (Lot 51)	Chelsea Court	4" Transite
Sept. 8	Fton Housing Ltd. (Lot 11)	Chelsea Court	4" Transite
Sept. 9	Fton Housing Ltd. (lot 53)	Chelsea Court	4" Transite
Sep't 12	Fton Housing Ltd. (Lot 54)	Chelsea Court	4" Transite
XXXXXX	XXXXXXXXXXXXXX	Canterbury Drive	New
Sept. 13	Fransis Corbett (Lot 5)	Exhibition House	4" Transite
Sept. 12	W. H. Reynolds & Son	Smythe St.	New
Sept 11	J. L. Simms & Sons Ltd.	Irvine St.	Storm Sewer
Sept. 12	Kenneth Dunn		New

Sept. 13	Wendall Farris (Lot 9)	Squires St.		New
Sept. 14	Kenneth Bartlett (Lot 31)	Squires St.		New
Sept. 17	F'ton Housing Ltd. (Lot 52)	Chelsea Court	New	4" Transite
Sept. 18	F'ton Housing Ltd. (Lot 55)	Chelsea Court	New	4" Transite
Sept. 19	F'ton Housing Ltd. (Lot 4)	Canterbury Drive	New	4" Transite
Sept. 16	Suburban Con. Co. (Lot 165)	Inglewood Drive	New	4" Transite
Sept. 19	Suburban Con. Co. (LOT 149)	Harewood Court		New
Sept. 19	Suburban Con. Co. (Lot 168)	Inglewood Drive		New
Sept. 20	L. S. Evans (Lot 51)	Windsor St.		New
Sept. 20	Donald Flynn (Lot 3)	Montgomery St.		New
Sept. 20	Mrs. Shirley Hickey	120 Victoria St.		New
Sept. 20	F'ton Housing Ltd. (Lot 3)	Canterbury Drive	New	4" Transite
Sept. 21	F'ton Housing Ltd. (Lot 15) <i>Leicester Street</i>	Brighton Court	New	4" Transite
Sept. 22	F'Ton Housing Ltd. (Lot 29)	Leicester St.	New	4" Transite
Sept. 25	F'ton Housing Ltd. (Lot 25)	Sheffield Court	New	4" Transite
Sept. 22	Donald Manzer (Lot 11)	Edinburgh St.	New	4" Transite
Sept. 27	F'ton Housing Ltd. (Lot 26)	Sheffield Court	New	4" Transite
Sept. 28	F'ton Housing Ltd. (Lot 31)	Leicester St.	New	4" Transite
Sept. 29	F'ton Housing Ltd. (Lot 32)	Leicester St.	New	4" Transite
Sept. 27	F'ton Housing Ltd. (Lot 36)	Brighton Court	New	4" Transite
Sept. 30	F'ton Housing Ltd. (Lot 12)	Leicester St.	New	4" Transite
Sept. 30	F'ton Housing Ltd. (Lot 30)	Brighton Court	New	4" Transite
Sept. 26	Elsie J. Murray (Lot 22)	Edinburgh St.		New
Sept. 29	Diamond Con. Co. (St. Annes Church)	Westmorland St.		New
Oct. 3	F. B. Gibson (Lot 33)	Kings College Road		New
Oct. 11	Bailey & Steen (Lot B)	Birch Court		New
Oct. 12	Clive Sutton (Lot A)	Birch Court		New
Oct. 2	F'ton Housing Ltd. (Lot 39)	Brighton Court	New	4" Transite
Oct. 2	F'ton Housing Ltd. (Lot 33)	Brighton Court	New	4" Transite
Oct. 3	F'ton Housing Ltd. (Lot 13)	Leicester St.	New	4" Transite
Oct. 4	F'Ton Housing Ltd. (Lot 2)	Canterbury Drive	New	4" Transite
Oct. 5	F'ton Housing Ltd. (Lot 1)	Canterbury Drive	New	4" Transite
Oct. 2	F'ton Housing Ltd. (lot 23)	Squires St.		New
Oct. 2	F'ton Housing Ltd. (Lot 22)	Squires St.		New
Oct. 21	E. M. Young Ltd.	York St.		Storm Sewer
Oct. 2	F' ton Housing Ltd. (Lot 35)	Brighton Court	New	4" Transite
Oct. 2	F8ton Housing Ltd. (lot 30)	Leicester St.	New	4" Transite
Oct. 12	F'ton Housing Ltd. (Lot 28)	Sheffield Court	New	4" Transite
Oct. 19	Hill Bros. (Lot 2)	Montgomery St.		New
Oct. 19	R. G. "McCullough (Lot 32)	Squires St.		New
Oct. 19	Matthews Plumbing (Y.M.C.A.)	Saunders St.		New
Oct. 20	Miss Eleanor Clarkson (Lot 10)	Valleyview St.		New
Oct. 23	Scott Clarkson (Lot 9)	Valleyview St.		New
Oct. 14	Malcolm Cummings (Lot 43)	Windsor St.		New
Oct. 23	Indian Affairs	Indian Reserve		Repaired
Oct. 25	Geo. Howes	Dundonald St.		New
Oct. 26	Hill Bros. (Lot186)	Inglewood Drive		New
Oct. 27	W. W. Waite	637 Forest Hill		New
Oct. 27	E. E. Hagerman Ltd (Synagogue)	Westmorland St.		Storm Sewer
Nov. 9	Diamond Con. Co. (Sobeys)	Beaverbrook Court		New
Nov. 9	Diamond Con. Co. (Sobeys)	Beaverbrook Court		Storm Sewer
Nov. 21	Dep't. of Agriculture	814 Montgomery St.		New
Nov. 23	Hill Bros. (Lot 166)	Inglewood Drive		New
Nov. 24	David M. Hurley	Turnbull Court		New
Nov. 24	Malcolm Cummings (LOT 9)	York St.		New
Nov. 27	L. W. Shemilt (Lot 4)	Spruce Terrace		New
Nov. 22	J. S. Risteen Co. Ltd.	Queen St.		New
Nov. 10	Wendall Farris (Lot 13)	York St.		New
Nov. 30	Gordon L. Christensen (Lot 73)	Montgomery St.		New
Nov. 30	Wendall Ferris (Lot 14)	York St.		New
Nov. 14	Carl Hay	232 Forest Acres Court		New
Nov. 30	Indian Affairs (Blk.2, Lot 1)	Indian Reserve		New
Nov. 30	Indian Affairs (Blk.1, Lot 2)	Indian Reserve		New
Dec. 5	Indian Affairs (Blk.4, Lot 5)	Indian Reserve		New
Dec. 1	Indian Affairs (Blk.6, Lot 1)	Indian Reserve		New
Dec. 4	Indian Affairs (Blk.4, Lot 2)	Indian Reserve		New
Dec 1	Indian Affairs (Blk.4, Lot 1)	Indian Reserve		New
Nov. 30	Indian Affairs (Blk.1, Lot 20)	Indian Reserve		New

Dec. 5	Suburban Con. Co. (Lot 157)	Harewood Court	New
Dec. 6	Eldon Dunphy (Lot 7)	Montgomery St.	New
Dec. 7	Suburban Con. Co. (Lot 152)	Harewood Court	New
	Suburban Con. Co. (Lot 169)	Inglewood Drive	New

NEW METERS 1961.

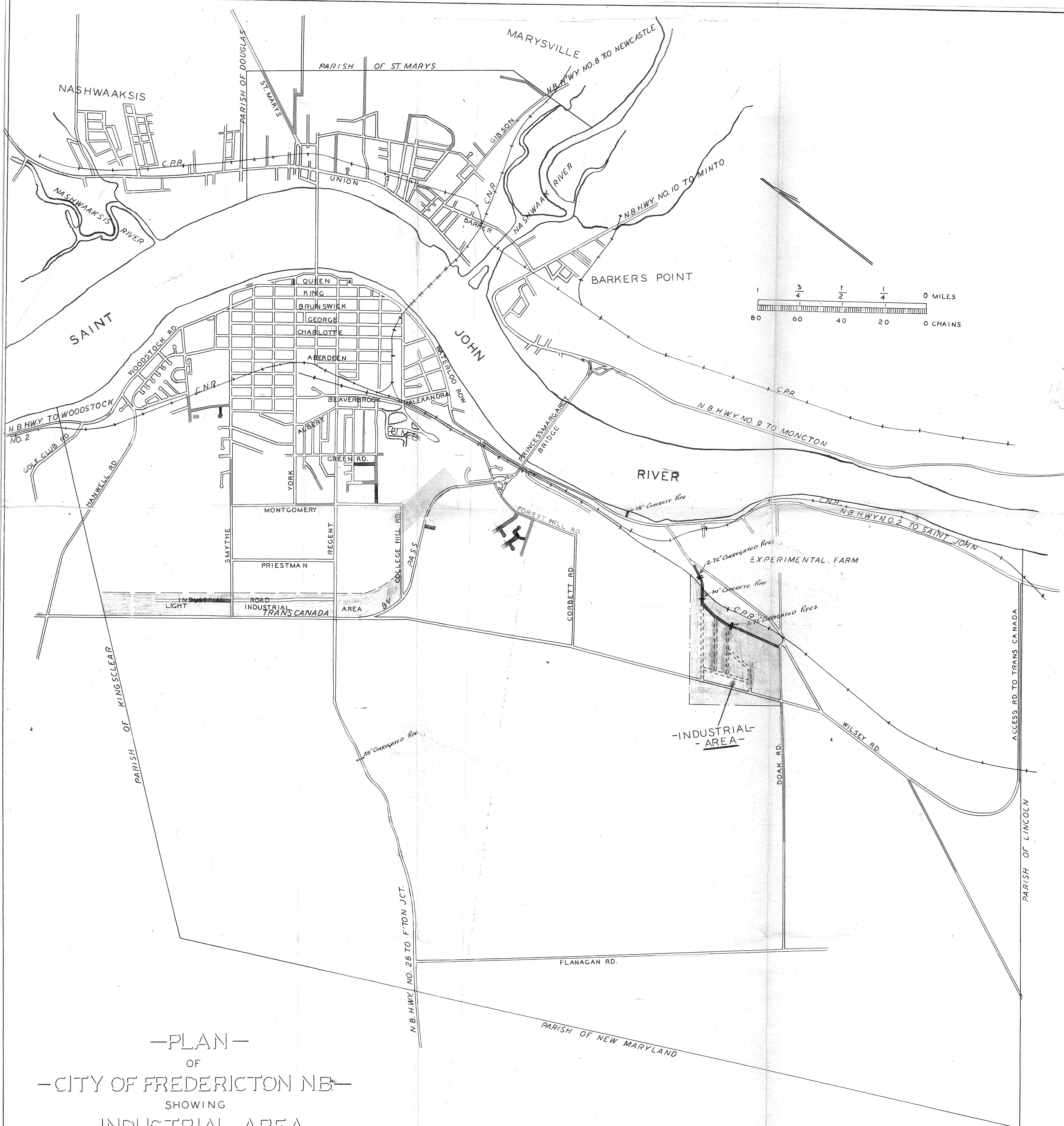
Jan. 4	Wendell Farris	488 Squires St.
Jan. 4	James F. Flynn	294 Hughes Street
Jan. 9	Fowler Bros	844 Smythe Street.
Jan. 9	Atlantic Rentals Ltd.	116 St. Marys Street.
Jan. 11	Hill Bros.	749 Montgomery Street.
Jan. 13	Suburban Co. Co.	90 Harewood Court.
Jan. 18	Suburban Con. Co.	1 Spruce Terrace.
Jan. 19	Paul H. Crabbe	172-174 Inglewood Drive.
Jan. 19	Shell Oil Co.	441 Union Street.
Jan. 21	E. Burden	814 Windsor Street
Jan. 24	New Dining Hall	U. N. B.
Feb. 1	Malcolm Cummings	100 Harewood Court
Feb. 1	K. Fitzgerald	286 M ^o ntgomery Street
Feb. 6	John Whelby	784 Windsor St.
Feb. 8	Fredericton High School	George Street
Feb. 20	Paul Harris	10 Harewood Court
Feb. 24	George Boldon	324 Victoria Street
Feb. 24	Frank Hatchey	25 Sherwood Court
March 1	Atlas Building Supplies	30 Harewood Court
March 9	Edward K. Robb	10 Spruce Terrace
March 22	Gerald White	800 Irvine Street
March 29	Wesley MacKay	523 Montgomery Street
March 29	Len Bird	545 Montgomery Street
April 20	Reginald Gulliver	129 Titus Street
April 24	John M. Vanwart	29 Phoenix Square
April 24	S. K. Brawn	96 St. Marys Street
April 24	Mrs. James Monteith	83-85-87 St. Marys Street
April 24	Queenie Rosborough	259 St. Marys Street
April 24	Charles Bowlen	73-75 St. Marys Street
April 25	John E. Warner	123 McKeen Street
April 25	Fredericton Housing	122 Friel Street
April 25	Chester Gorman	152 Friel Street
April 25	Percy Morgan	136 Friel Street
April 25	George C. Mason	362 Gibson Street
April 25	William Irvine	486 Gibson Street
April 27	G. H. Tattersall	657 Elizabeth Street
May 3	Race Track Barn	Fredericton Exhibition Ltd.
May 4	Pinky Coin Laundry	555-557 Union Street
May 11	E. C. Atkinson	168 Queen Street
May 12	E. K. Gamble	220 Lincoln Road
May 12	Fred Leslie	262 Regent Street
May 18	Russell Gourley	468-470 Union Street
May 19	Eldon Maston	566 McLaren Avenue
May 23	Ernest Clark	740 Coombes Street
May 24	Mrs. S. Thane Belyea	95 Smith Street
May 24	Albert Hovey	384 Forbes Street
May 26	Donald Barton	176 Pine Street
May 31	Myles Newman	156 Titus Street

June 2	Coliseum	Exhibition Grounds
June 6	Hubert Lovely	198 Montgomery Street
June 21	Suburban Con. Co.	538 Squires Street
June 21	Dr. Allan McAndrew	769 Windsor Street
June 21	Fred Comozzi	80 Harewood Court
July 3	R. Stuart	559 Montgomery Street
July 5	Capital Gardens Restaurant	Queen Street
July 5	R. N. Bird	254 Medley Street
July 10	W.H. Palmer	305 Gibson Street
July 10	Annie O. Caverhill (Meter # 1)	139-141 Brunswick Street
July 10	Annie O. Caverhill (Meter # 2)	129-141 Brunswick Street
July 13	Aldana Christie	138 Gibson Street
May 3	Frank Day	548 Lincoln Road
July 14	Arlington Blizzard	146 Titus Street
July 14	Charles Murray	150 Titus Street
July 14	Ferd. MacDonald	142 Titus Street
July 14	Viger Stone	152 Titus Street
July 14	Ralph Titus	155 Titus Street
July 14	Mrs. Faye Titus	164 Titus Street
July 18	Hazen Bennett	803 Park Street
July 19	Oliver Twist	128 Montgomery Street
July 20	J. D. Creighan Co. Ltd.	412 Queen Street
July 24	Eldon Dunphy	826 Windsor Street
July 24	Danna Wasson	787 Windsor Street
July 26	P. A. Daigle	228 Albert Street
July 28	Eldon Dunphy	152 Montgomery Street
July 28	Archie Fox	212 Montgomery Street
August 1	Irving Service Station	396 Lincoln Road
August 2	Malcolm Cummings	808 Windsor Street
August 2	Hill Bros	50 Sherwood Court
August 3	Shell Oil Co.	535 Smythe Street
August 4	Charlotte Street School	732 Charlotte Street
May 15	Community Racing Association	Building #33, Exhibition Grounds
July 3 10	L. J. Breneol	522 Squires Street
July 10	Lawrence E. Alward	548 Squires Street
July 10	Harold Doherty	789 Reid Street
July 12	Fredericton Housing Ltd.	535 Squires Street
July 15	C. G. Bird	395 Inglewood Drive
August 9	Irving Service Station	754 Union Street
August 9	R. E. Hanusiak	766 Windsor Street
August 9	C. G. Wortman	842 Windsor Street
August 9	Bailey & Steen	59 Birch Court
August 11	Richard Atherton	299 Campbell Street
August 14	Stanley Slicer	525 Squires Street
August 15	Jack White	515 Squires Street
August 15	Robert Johnson	505 Squires Street
August 16	Robert Calhoun	164 Montgomery Street
August 17	William S. Dines	495 Westmoreland Street
August 22	Mary M. Sweeney	693 Union Street
August 22	L. B. Bartlett	468 Montgomery Street
August 23	Malcolm Cummings	805 Irvine Street
August 25	C. Campbell	874 York Street
August 25	A. T. Sweed	112 St. John Street
August 25	Malcolm Cummings	744 Green Road

August 29	Western Tire & Auto	546 King Street
August 29	James London	854 Smythe Street
Sep't. 5	Frank O'Donnell	524 Regent Street
Sep't. 5	Mrs. Albert Price	727 MacLaren Avenue
Sep't. 6	John Rushbrook	173 Clark Street
Sep't. 6	Suburban Con. Co.	877 York Street
Sep't. 7	Mrs. Maude Fulton	624 Brunswick Street
Sep't. 7	Oris Jones	747 Dobie Street
Sep't. 11	Percy Khoury	198 St. John Street
Sep't. 11	Central Trust Co.	168 Pine Street
Sep't. 11	Frank Little	109 Kings College Road
Sep't. 18	Sgt. Rammage	485 Squires Street
Sep't. 18	L. S Parsons	667 Phillips Street
Sep't. 20	Raymond Crewdson	96 Saunders Street
Sep't. 20	A. MacKanzie	90-92 McKeen Street
August 24	Hill Bros.	763 Fenety Street
Sep't. 26	Wasson's White Rose Service Station	150 Smythe Street
Sep't. 26	Capital Winter Club	232 Rockwood Avenue
Sep't. 27	G. B. Thompson	235 Edinburgh Street.
Sep't. 27	D. P. Manzer	214 Edinburgh Street
Oct. 4	N. B. Dep't. Public Works	607 Campbell Street
Oct. 5	E. Lindon	304 Dayton Court
Oct. 5	Brunswick Bowling Alley	120 Carleton Street
Oct. 5	Jaspef Wade	165 Friel Street
Oct. 12	Chester Campbell	458 Montgomery Street
Oct. 17	Mrs. M. Budovitch	40 Sherwood Court
Oct. 17	D. J. Sullivan	571 Albert Street
Oct. 17	M. K. Holman	249 Montgomery Street
Oct. 18	Vernon Greene	140 Montgomery Street
Oct. 18	Kenneth Dunn	790 Irvine Street
Oct. 18	Clive Sutton	60 Birch Court
Oct. 18	Ross Loring	98 Canterbury Drive
Oct. 18	L. Sears	16 Cheleas Court
Oct. 18	Neville Lynch	20 Chelsea Court
Oct. 18	Jack Dunphy	15 Chelsea Court
Oct. 19	Darrell Richardson	124 Canterbury Drive
Oct. 19	Roy Newell	26 Chelsea Court
Oct. 19	Ken Fury	30 Chelsea Court
Oct. 19	Gilbert Cunninhjam	29 Chelsea Court
Oct. 19	Harry Slater	25 Chelsea Court
Oct. 19	P. O. Beaton	19 Chelsea Court
Oct. 23	L. S. Evans	860 Windsor Street
Oct. 25	Fred Atkinson	498 Squires Street
Oct. 31	Bailey & Steen	66 Birch Court
Nov. 1	Brian Carter	495 Squires Street
November 4	Sussex Beverages	140 Clark Street
Nov. 14	C. R. Hillman	555 Squires Street
Nov. 14	George Burdett	545 Squires Street
Nov. 17	A. B. Connell	60 Canterbury Drive
Nov. 17	DeWolf	50 Canterbury Drive
Nov. 17	Mrs. Jewett	40 Canterbury Drive
Nov. 19	L. Slipp	7 Brighton Court
Nov. 20	Dr. I. W. Varty	24 Brighton Court
Nov. 20	R. McLaggan	8 Brighton Court

Nov. 22	J. Flynn	835 Irvine Street
Nov. 23	R. McLenahan	887 York Street
Nov. 23	George Harvey	40 Leicester Street
Nov. 23	H. Carter	17 Sheffield Court
Nov. 23	G. Laskey	23 Leicester Street
Mov. 23	W. Pledge	21 Leicester Street
Nov. 23	E. Allaby	30 Leicester Street
Nov. 23	Fredericton Medical Clinic	206 Rookwood Avenue
Nov. 24	F. B. Gibson	220 Kings College Road
Nov. 25	B. Munn	70 Sheffield Court
Nov. 25	W. M. King	60 Sheffield Court
Nov. 25	F. Tims	4 Leicester Street
Nov. 28	C. A. Ferguson	335 Inglewood Drive
Nov. 28	Suburban Con. Co.	273 Inglewood Drive
Dec. 1	Scott Clarkson	755 Valleyview Street
Dec. 1	Miss Eleanor Clarkson	741 Valleyview Street
Dec. 7	J. Murray	344 Edinburgh Street
December 7	St. Annes Parish Church	Westmorland Street
Dec. 8	John Gregory	616 Union Street
Dec. 8	Percy McCoombes	464 Union Street
Dec. 11	George Howes	360 Dundonald Street
Dec. 15	Kenneth Bartlett	568 Squires Street
Dec. 19	Arthur McKenzie	656 Charlotte Street
Dec. 20	Mrs. Mabel Davis	359-361 York Street
Dec. 20	H. T. Coyle	726-728 Beaverbrook Street
Dec. 20	A. O'Leary	718 Beaverbrook Street
Dec. 21	J. M. Taylor Est.	232 Northumberland Street
Dec. 21	Fred Thompson	173 Northumberland Street
Dec. 21	Guy DiGiacinto	75 Queen Hotel Alley
Dec. 22	W. W. Dignan	886 Parker Street
Dec. 28	C. S. Brooks	642 MacLaren Avenue
Oct. 27	Charles Noble	528 Squires Street





—PLAN—
—CITY OF FREDERICTON NB—
SHOWING
—INDUSTRIAL AREA—

SCALE 1"=20 CHAINS

DRAWN BY: Charles McLean

CONSTRUCTION 1961.

GRADING AND GRAVELLING	4.86 MILES
DITCHING	1.00 MILES
INDUSTRIAL ROAD	.80 MILES
NEW STREETS (GRAVEL ROAD CONSTRUCTION)	.99 MILES

