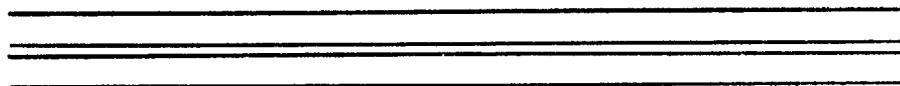


THE CITY OF  
PROVIDENCE, RHODE ISLAND

Annual Report  
of the  
Department of Public Works

FOR THE FISCAL YEAR  
**1959 -- 1960**



DEPARTMENT OF PUBLIC WORKSOFFICE OF THE DIRECTOR

THE HONORABLE WALTER H. REYNOLDS,  
MAYOR OF THE CITY OF PROVIDENCE,  
CITY HALL, PROVIDENCE, R.I.

DEAR SIR:

THE FOLLOWING ANNUAL REPORT, MADE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 46 OF CHAPTER 832 OF THE PUBLIC LAWS OF THE STATE OF RHODE ISLAND, JANUARY SESSION, 1940, COVERS THE WORK PERFORMED DURING THE YEAR ENDING SEPTEMBER 30, 1960 BY THE VARIOUS DIVISIONS OF THE DEPARTMENT OF PUBLIC WORKS.

APPENDED TO THIS REPORT AND TO BE CONSIDERED AS A PART THEREOF, ARE THE REPORTS OF THE FOLLOWING DIVISIONS OF THIS DEPARTMENT:

BUSINESS MANAGEMENT	ENGINEERING OFFICE
CONSTRUCTION AND MAINTENANCE	SANITATION
PUBLIC SERVICE ENGINEER	HARBOR

CONTRACT WORK WAS COMPLETED DURING THE YEAR ON THE FOLLOWING PROJECTS:

"CONSTRUCTION OF HIGHWAYS IN SUNDRY STREETS" BY THE M.A. GAMMINO CONST. CO.

"BUILDING OF SEWERS IN SUNDRY STREETS" BY D'ERCOLE CONSTRUCTION CO.

"SUBSURFACE EXPLORATIONS FOR THE EXTENSION OF THE MUNICIPAL DOCK" BY THE RAYMOND CONCRETE PILE COMPANY.

"COMPLETE RENEWAL OF REFRACTORY LININGS OF GARBAGE INCINERATOR UNIT No. 2" BY THE TYNAN INCINERATOR CO., INC.

CONTRACT WORK WAS IN PROGRESS ON THE FOLLOWING PROJECTS:

"CONSTRUCTION OF PUBLIC WORKS HIGHWAY OFFICE BUILDING AND GARAGE". PLANS AND SPECIFICATIONS FOR THIS PROJECT WERE PREPARED BY GREER, KENT, CRUISE & ALDRICH AND JOSEPH P. FLYNN IS THE BUILDING CONTRACTOR.

"PUBLIC WORKS HIGHWAY STORAGE BINS AND CONVEYING EQUIPMENT" BY CONVEYORS INCORPORATED.

"BUILDING OF SEWERS IN SUNDRY STREETS" BY THE FANNING & DOORLEY CONST. COMPANY.

"CONSTRUCTION OF HIGHWAYS IN SUNDRY STREETS" BY THE NARRAGANSETT IMPROVEMENT CO.

"FURNISHING AND INSTALLING A COMPLETE TWO-WAY RADIO COMMUNICATIONS SYSTEM" BY THE GENERAL ELECTRIC COMPANY.

"FURNISHING AND INSTALLING A SYSTEM OF OVERFIRE AIR JETS IN GARBAGE INCINERATOR UNIT No.2" BY JOHNSON AND MAYLOR CO., INC.

"IMPROVEMENTS AT MAIN SEWAGE PUMPING STATION, RECONDITIONING OF VACUUM FILTERS AND MISCELLANEOUS IMPROVEMENTS AT FIELDS POINT SEWAGE TREATMENT PLANT".

PLANS AND SPECIFICATIONS FOR THIS PROJECT WERE PREPARED BY METCALF & EDDY AND THE WORK WAS DIVIDED INTO THE FOLLOWING THREE DIVISIONS:

DIVISION 1. "IMPROVEMENTS AT SEWAGE TREATMENT PLANT" BY THE ARDSLEY CONST. CO., INC. AND A.C. KAESTNER, INC.

DIVISION 11. "RECONDITIONING OF VACUUM FILTERS" BY THE KOMLINE-SANDERSON ENGINEERING CORPORATION.

DIVISION 111. "FURNISHING AND INSTALLING 2,300 VOLT SWITCHBOARD AT SEWAGE PUMPING STATION" BY THE COKEN COMPANY.

"BULKHEAD EXTENSION AT THE MUNICIPAL WHARF". PLANS AND SPECIFICATIONS FOR THIS PROJECT WERE PREPARED BY FENTON G. KEYES ASSOCIATES AND THE M.A. GAMMINO CONST. COMPANY IS THE CONSTRUCTION CONTRACTOR.

NEW HIGHWAY CONSTRUCTION, BY CONTRACT, IN STREETS ORDERED BUILT BY THE CITY COUNCIL, CONSISTED OF 24,962 SQUARE YARDS OF BITUMINOUS MACADAM PAVEMENT AND 20,897 SQUARE YARDS OF ASPHALTIC CONCRETE PAVEMENT ON A PENETRATED CRUSHED STONE BASE. P. W. HIGHWAY FORCES ALSO CONSTRUCTED 523 SQUARE YARDS OF PAVEMENT.

HIGHWAY RECONSTRUCTION CONSISTED OF REPAIRS TO AND SURFACING OF 151,098 SQUARE YARDS OF HIGHWAYS WITH AN ASPHALTIC CONCRETE PAVEMENT, BY THE PUBLIC WORKS HIGHWAY FORCES.

NEW SEWER CONSTRUCTION, BY CONTRACT, CONSISTED OF THE BUILDING OF 0.42 MILES OF MAIN SEWERS, TOGETHER WITH LATERALS AND DRAINAGE STRUCTURES IN SUNDRY STREETS.

SEVERAL CONFERENCES WERE HELD WITH PARTIES INTERESTED IN LOCATING AT THE MUNICIPAL DOCK AND FURTHER DEVELOPMENT OF THIS FACILITY APPEARS VERY FAVORABLE.

OUR RELATIONS HAVE BEEN VERY CORDIAL WITH THE LOCAL OFFICE OF THE BUREAU OF PUBLIC ROADS, HEADED BY MR. JOSEPH WESTELL; THE STATE DEPARTMENT OF PUBLIC WORKS, HEADED BY MR. ANGELO MARCELLO; THE U.S. ARMY CORPS OF ENGINEERS; AND THE CONSULTING ENGINEERS ON THE NORTH-SOUTH FREEWAY, LOUISQUISSET PIKE, HUNTINGTON AVENUE EXPRESSWAY, FOX POINT HURRICANE BARRIER, RED BRIDGE, AND HARTFORD AVENUE PROJECTS AND WE APPRECIATE THE COURTESIES AND COOPERATION EXTENDED US.

THIS DEPARTMENT HAS RENDERED ASSISTANCE TO VARIOUS CITY DEPARTMENTS AND OUTSIDE AGENCIES, INCLUDING THE PARK, RECREATION, PUBLIC WELFARE, TRAFFIC ENGINEERING, REDEVELOPMENT, PUBLIC SAFETY, WATER AND HEALTH DEPARTMENTS.

I AM VERY GRATEFUL FOR AND APPRECIATIVE OF THE SPLENDID COOPERATION EXTENDED ME BY THE CITY COUNCIL COMMITTEE ON PUBLIC WORKS, COMPRISED OF CHAIRMAN RALPH MATERA, WILLIAM A. GRAY, ANDREW F. EGAN, THOMAS L. PAYNE AND FRANK LAZARUS.

THE SUCCESSFUL OPERATION OF THE DEPARTMENT IS DUE TO THE UNTIRING EFFORTS OF THE DEPUTY DIRECTOR, DIVISION AND SECTION HEADS, AND TO THEIR RESPECTIVE STAFFS, AND MY SINCERE THANKS GO TO THEM FOR JOBS WELL DONE.

I ALSO WISH TO EXPRESS MY THANKS AND APPRECIATION TO OTHER CITY DEPARTMENTS FOR THE COOPERATION EXTENDED TO THIS DEPARTMENT.

#### RECOMMENDATIONS

1. ERECT A NEW FENCE ON THE BRIDGE AT MARKET SQUARE, BETWEEN WESTMINSTER STREET AND EXCHANGE PLACE.
2. PAINT THE UNDERSIDE OF THE BRIDGE IN THE MEMORIAL, MARKET AND CRAWFORD SQUARES AREA.
3. RENEW THE LININGS IN THE FURNACE AND COMBUSTION CHAMBER, RENEW THE BRICK AND STEEL WORK OF THE ASH HOPPER; RENEW THE ASH CONVEYOR; OVERHAUL THE ELECTRIC CRANE; ALL IN GARBAGE INCINERATOR UNIT No. 1, AND PURCHASE TWO NEW GARBAGE GRAB BUCKETS.
4. INSTALL A WARNING SYSTEM FOR THE DETECTION OF RADIO ACTIVE ISOTOPES AT A POINT IN THE SEWER SYSTEM WHICH WILL ALLOW AMPLE TIME TO PROTECT PERSONNEL AT THE SEWAGE DISPOSAL PLANT FROM RADIO ACTIVITY.

RESPECTFULLY SUBMITTED,

*Charles F. McElroy*  
CHARLES F. MCELROY  
DIRECTOR OF PUBLIC WORKS.

IN CITY COUNCIL

MAR 2 - 1961

READ:

WHEREUPON IT IS ORDERED THAT  
THE SAME BE RECEIVED.

*Robert Whelan*  
CLERK

MR. CHARLES F. MCELROY,  
 DIRECTOR OF PUBLIC WORKS,  
 CITY HALL, PROVIDENCE, R.I.

DEAR SIR:

I RESPECTFULLY SUBMIT THE ANNUAL REPORT OF THE BUSINESS MANAGEMENT OFFICE OF THE DEPARTMENT OF PUBLIC WORKS FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1960.

STATEMENT OF REVENUE - ESTIMATED AND ACTUAL

	BUDGET ESTIMATE	NET-ACTUAL REVENUE	BUDGET EXCESS	COMPARISON DEFICIENCY
BUSINESS AND NON-BUSINESS:				
LICENSES:				
SIDEWALK CONTRACTORS	750.00	540.00	-	210.00
HIGHWAY PRIVILEGES	1200.00	1318.75	118.75	-
TOTAL BUSINESS - NON BUSINESS	\$ 1950.00	\$ 1858.75	\$ 118.75	\$ 210.00
SPECIAL ASSESSMENTS:				
SEWERS	55000.00	36832.11	-	18167.89
TOTAL SPECIAL ASSESSMENTS	\$55000.00	\$36832.11	-	\$18167.89
DEPARTMENTAL REVENUE:				
SEWAGE PUMPING	-	33.12	33.12	-
SEWAGE DISPOSAL	-	29199.72	29199.72	-
GARBAGE COLLECTION AND DISPOSAL	10000.00	342.26	-	9657.74
REFUSE COLLECTION AND DISPOSAL	-	670.00	670.00	-
HIGHWAYS	24000.00	23835.98	-	164.02
BRIDGE MAINTENANCE	-	13.04	13.04	-
FORESTRY	-	284.74	284.74	-
SEWER CONSTRUCTION AND MAINTENANCE	40000.00	69012.71	29012.71	-
STREET LIGHTING	-	102.91	102.91	-
MUNICIPAL DOCKS	210000.00	237088.96	27088.96	-
DRAW BRIDGE	-	148.67	148.67	-
TOTAL DEPARTMENTAL REVENUE	\$284000.00	\$ 360732.11	\$ 86553.87	\$ 9821.76
TOTAL STATEMENT	\$340950.00	\$ 399422.97	86672.62	\$28199.65

STATEMENT OF EXPENDITURES

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1960

	PERSONAL SERVICES		SERVICES OTHER THAN PERSONAL		MATERIALS AND SUPPLIES		SPECIAL ITEMS		EQUIPMENT OUTLAY		STRUCTURES AND IMPROVEMENTS		TOTAL
	PERSONAL SERVICES	OTHER THAN PERSONAL	PERSONAL	OTHER THAN PERSONAL	SUPPLIES	OTHER THAN SUPPLIES	ITEMS	OTHER THAN ITEMS	OUTLAY	OTHER THAN OUTLAY	IMPROVEMENTS	OTHER THAN IMPROVEMENTS	
GENERAL ADMINISTRATION	28678.02	1604.18	59.97	-	-	-	-	-	-	-	-	-	30342.17
BUSINESS MANAGEMENT	32157.36	678.06	276.04	-	-	-	-	-	344.62	-	-	-	33456.08
ENGINEERING OFFICE	139624.05	5341.92	712.10	-	-	-	-	-	-	-	-	-	145678.07
<u>SANITATION DIVISION</u>													
SANITATION ADMINISTRATION	11808.34	656.85	15.39	-	-	-	-	-	-	-	-	-	12480.58
STREET CLEANING	339158.96	79625.05	4897.22	-	-	-	-	-	1634.90	-	-	-	422316.13
SEWAGE PUMPING STATION	62617.42	7390.26	3428.60	-	-	-	-	-	-	-	-	-	73436.28
SEWAGE DISPOSAL	216323.43	110503.80	137226.39	-	-	-	-	-	258.64	-	125000.00	-	589312.26
GARBAGE COLLECTION AND DISPOSAL	572108.74	180727.46	10692.29	-	-	-	4407.34	-	-	-	-	-	767935.83
REFUSE COLLECTION AND DISPOSAL	105428.74	38785.50	-	-	-	-	-	-	-	-	-	-	144214.24
<u>CONSTRUCTION AND MAINTENANCE DIVISION</u>													
CONSTRUCTION AND MAINTENANCE ADMINISTRATION	8232.04	932.80	-	-	-	-	-	-	-	-	-	-	9164.84
HIGHWAYS	734024.29	163448.12	110941.43	-	-	-	-	-	410.90	-	-	-	1008824.74
BRIDGE MAINTENANCE	38273.75	3046.48	8114.56	-	-	-	-	-	-	-	-	-	49434.79
SIDEWALKS AND CURBING	17978.10	2719.15	853.23	-	-	-	-	-	107.17	-	-	-	21657.65
FORESTRY	76613.40	18634.52	4652.68	-	-	-	-	-	-	-	-	-	99900.60
SNOW REMOVAL	132425.85	69505.52	46213.27	-	-	-	-	-	-	-	-	-	248144.59
SEWAGE CONSTRUCTION AND MAINTENANCE	322704.79	62059.46	22458.69	-	-	-	-	-	1226.35	-	-	-	408486.29
PUBLIC BUILDINGS	78557.85	4222.47	599.67	-	-	-	62.20	-	-	-	-	-	83442.19
DRAWBRIDGE OPERATION	39132.36	872.50	346.07	-	-	-	-	-	-	-	-	-	40350.93
MUNICIPAL DOCK	32065.30	24579.81	1966.23	-	-	-	-	-	-	-	-	-	58611.34
HARBOR MASTER	4004.81	113.80	16.20	-	-	-	-	-	-	-	-	-	4134.81
STREET LIGHTING	4472.34	461608.19	-	-	-	-	-	-	-	-	-	-	466080.53
DIVISION OF RELOCATION	20056.30	3317.96	348.40	-	-	-	2000.00	-	-	-	-	-	25722.66
TOTAL - PUBLIC WORKS ACTIVITIES	\$ 3016443.19	\$ 1240413.86	\$ 350618.43	\$ 6469.54	\$ 3982.53	\$ 125000.00	\$ 4743127.60						

THE FOLLOWING SERVICES WERE ALSO RENDERED BY THIS DEPARTMENT

APPLICATIONS RECEIVED

FOR ALTERING DRIVEWAYS	176
CONSTRUCTION OF DRIVEWAYS	183
CURBING RESETS	<u>46</u>
TOTAL APPLICATIONS	405

LICENSES ISSUED

NEWSPAPER STANDS	11
PUSH CARTS	13
SIDEWALK STANDS	42
DRAIN LAYERS LICENSES	8
DRAIN LAYERS LICENSES (LIMITED TO SPRINKLER SYSTEMS)	<u>2</u>
TOTAL LICENSES	76

PERMITS ISSUED

PUBLIC UTILITIES	215
BLASTING	3
FOR MOVING CUMBERSOME EQUIPMENT, ETC.	15
STREET OPENINGS (WATER SUPPLY BOARD)	443
ORIGINAL PERMITS FOR SEWER CONNECTIONS	210
EXTENSION OF HOUSE DRAINS	410
SIDEWALK OPENINGS FOR WATER SERVICE	67
STREET OPENINGS (OTHER)	<u>188</u>
TOTAL PERMITS	1551

RESPECTFULLY SUBMITTED

JOHN V. DAVIDSON  
BUSINESS MANAGER.

ENGINEERING OFFICE

MR. CHARLES F. McELROY,  
DIRECTOR OF PUBLIC WORKS,  
CITY HALL, PROVIDENCE, R.I.

DEAR SIR:

FOLLOWING IS THE ANNUAL REPORT COVERING THE VARIOUS ACTIVITIES OF THE ENGINEERING OFFICE FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1960.

THE EXPENDITURES OF THE DIVISION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$139,624.05
ITEM 1 SERVICES OTHER THAN PERSONAL	5,341.92
ITEM 2 MATERIALS AND SUPPLIES	<u>712.10</u>
TOTAL	\$145,678.07

STREET LINE AND CITY PROPERTY SECTION

NOTICES OF INTENTION TO BUILD

THERE WERE 210 NOTICES OF INTENTION TO BUILD FILED IN THIS OFFICE DURING THE FISCAL YEAR. TWENTY OF THESE WERE NOT REQUIRED FOR VARIOUS REASONS. IN RESPONSE TO THE REMAINING 190 NOTICES, THE STREET LINES WERE MARKED ON THE GROUND AS REQUESTED FOR THE SPECIFIED LOCATIONS.

FIELD SURVEYS ON THE 25 STREETS ACCEPTED AS PUBLIC HIGHWAYS BY THE CITY COUNCIL WERE MADE AND THE LAY-OUT MAPS WERE DRAWN FOR OFFICE USE AND FOR THE OFFICIAL RECORDS OF THE CITY CLERK.

INFORMATION PERTAINING TO STREET LINES, INCLUDING RECORDS OF STREET LAY-OUTS, WIDENINGS, ABANDONMENTS, ALIGNMENT CHANGES AND NAME CHANGES WAS FURNISHED TO ENGINEERING FIRMS AND TITLE COMPANIES THROUGHOUT THE YEAR.

STREET LINES WERE MARKED OUT ON THE GROUND FOR THE CONSTRUCTION OF NEW SEWERS WHEN REQUESTED BY THE SEWER SECTION OF THE ENGINEERING OFFICE.

STREET LINE INFORMATION WAS FURNISHED ENGINEERS FOR THE STATE OF RHODE ISLAND, DEPARTMENT OF PUBLIC ROADS IN CONJUNCTION WITH THEIR WORK ON THE NORTH-SOUTH FREEWAY AND THE EXTENSION OF THE DENNIS J. ROBERTS EXPRESSWAY.

THE FOLLOWING STREETS WERE RECEIVED BY THE CITY COUNCIL UNDER VARIOUS FORMS GOVERNING THE ACCEPTANCE OF STREETS DURING THE YEAR:

<u>NAME</u>	<u>BETWEEN POINTS</u>	<u>LENGTH IN FEET</u>
ALDEN STREET	SAMOSSET AVENUE TO VICTORIA STREET	407.78
AMITY STREET	ACADEMY AVENUE TO PEMBERTON STREET	360.28
ARGOL STREET	EDGEWORTH AVENUE TO CITY LINE	66.00
ATWOOD STREET	UNION AVENUE TO NORTHERLY LINE WALLACE STREET	996.13
CASS STREET	RUGBY STREET TO EDDY STREET	470.00
DOME STREET	OAKLAND AVENUE TO MALBONE STREET	200.00
DRESSER STREET	MELISSA STREET TO EASTERLY LINE FLOWER STREET	997.75
GRAFTON STREET	METCALF STREET TO PARLEY STREET	480.00
HALTON STREET	POTTERS AVENUE TO HUNTINGTON AVENUE	580.05
HUNNEWELL AVENUE	200 FEET NORTH OF ADA AVENUE TO CHALKSTONE AVENUE	881.12
LAWN STREET	BOLTON AVENUE TO GLOVER STREET	160.00
LONGWOOD AVENUE	KENTLAND AVENUE TO CITY LINE	230.00
MYSTIC STREET	PRAIRIE AVENUE TO ITS EASTERLY TERMINATION	448.87
NAHANT STREET	OPPER STREET TO RUSSO STREET	279.63
NEWCOMB STREET	COGGESHALL STREET TO FORSYTH STREET	319.04
NIAGARA STREET	TRIANGULAR PORTION OPPOSITE EARLY STREET	
NIAGARA STREET	TRIANGULAR PORTION AT ROOMAN STREET	
OAKWOOD AVENUE	NORTHERLY LINE FREEDOM ROAD TO 200 FEET SOUTHERLY	200.00
REDWOOD DRIVE	CITY LINE TO LONGWOOD AVENUE	340.00
ROYAL AVENUE	GENTIAN AVENUE TO CITY LINE	260.00
SMART STREET	JOB STREET TO 200 FEET WESTERLY	200.00
SYDARIS STREET	RUSHMORE AVENUE TO SISSON STREET	432.96
SYRACUSE STREET	LAUREL HILL AVENUE TO ITS EASTERN TERMINATION	99.52
WALLACE STREET	CUMERFORD STREET TO ATWOOD STREET	291.52
WARDLAW AVENUE	RIVER AVENUE WESTERLY TO PORTION ALREADY RECEIVED	<u>386.77</u>
	TOTAL FEET	9,087.42
		OR 7.121 MILES

THE FOLLOWING STREETS WERE ABANDONED DURING THE YEAR:

RECEIVED STREETS ABANDONED

<u>NAME</u>	<u>BETWEEN POINTS</u>	<u>LENGTH IN FEET</u>
BURNSIDE STREET	OXFORD STREET TO SAYLES STREET	368.03
DANFORTH STREET	133.15 FEET NORTH OF ANGLE NORTH OF SMITH STREET, NORTHERLY TO VALE STREET	699.35
ELM STREET	HOPPIN STREET TO IMPERIAL PLACE	241.98
MINER STREET	OXFORD STREET TO SAYLES STREET	363.86
SIXTH STREET	SUMMIT AVENUE TO HIGHLAND AVENUE	500.00
VALE STREET	CAMDEN AVENUE TO DANFORTH STREET	160.00
WEST RIVER STREET	782.60 FEET SOUTH OF BRANCH AVENUE, 870.71 FEET SOUTHERLY	870.71
WEST RIVER STREET	595.47 FEET SOUTH OF BRANCH AVENUE 198.45 FEET SOUTHERLY	198.45
	TOTAL (FEET)	3,402.30

UNRECEIVED STREETS ABANDONED

BELMONT AVENUE	CLAREMONT AVENUE TO MT. PLEASANT AVENUE	160.00
CLARA STREET	92.04 FEET SOUTH OF SOUTHERLY LINE OF VALE STREET, NORTHERLY TO ITS NORTHERLY TERMINATION	197.78
ELK STREET	WEST RIVER STREET TO ITS WESTERLY TERMINATION	217.00
FONES ALLEY	BROWN STREET TO POINT 150 FEET EASTERLY	150.00
SMART STREET	EASTERLY LINE OF PARENTE STREET OT ITS FORMER EASTERLY TERMINATION	85.46
UNNAMED GANGWAY	CEDAR STREET TO ADIE STREET	275.00
UNNAMED GANGWAY	JUDITH STREET TO HULDAH STREET	160.00
VALE STREET	EASTERLY LINE OF DANFORTH STREET TO VALE STREET	200.00
	TOTAL (FEET)	1,445.24

THE APPROXIMATE LENGTH OF STREETS PLATTED BUT NOT RECEIVED IS 49.133 MILES.

THE NET ADDITION DURING THE YEAR ADDED TO THE PREVIOUS TOTAL MAKES THE LENGTH OF RECEIVED STREETS AT THE END OF THE FISCAL YEAR 1960 (MEASURED ALONG PROPERTY LINES) 369.192 MILES.

IN ADDITION TO THE TOTAL OF RECEIVED STREETS THERE ARE 3.21 MILES OF ROADWAYS IN THE GOVERNOR DENNIS J. ROBERTS EXPRESSWAY.

THE FOLLOWING STREETS, ALL RECENTLY PLATTED, HAVE BEEN ADDED TO THE LIST OF UNRECEIVED STREETS:

WEST RIVER STREET	FROM CHARLES STREET TO BRANCH AVENUE
CORLISS STREET.	FROM CHARLES STREET TO WEST RIVER STREET
INDUSTRIAL DRIVE,	FROM NO. MAIN STREET TO CORLISS STREET

CITY PROPERTY PLANS AND SURVEYS WERE MADE COVERING THE FOLLOWING PROJECTS:

COLLYER STREET	PROPOSED LEASE
MEETING STREET	PROPOSED LEASE
FIELDS POINT	RICHFIELD OIL CO. PIPELINE
NIAGARA STREET	LAND DEEDED FOR HIGHWAY
FIELDS POINT	PROPOSED LEASE
NORTH BURIAL GROUND	MAGNETIC NEEDLE VARIATION
PUTNAM STREET	PROPOSED LEASE
GANGWAY (ADIE TO CEDAR STS)	PROPOSED ABANDONMENT
CHARLES STREET	PROPOSED LEASE
DOUGLAS AVENUE	PROPOSED SALE
MINER STREET	PROPOSED ABANDONMENT (PORTION)
BURNSIDE STREET	PROPOSED ABANDONMENT (PORTION)
CLARA STREET	PROPOSED ABANDONMENT (PORTION)
VALE STREET	PROPOSED ABANDONMENT (PORTION)
ELK STREET	PROPOSED ABANDONMENT
DANFORTH STREET	PROPOSED ABANDONMENT (PORTION)
FIELDS POINT	PROPOSED LEASE
WEST RIVER STREET	PROPOSED ABANDONMENT (PORTION)
SIXTH STREET	PROPOSED ABANDONMENT (PORTION)
CHACE AVENUE	PROPOSED EASEMENT
WEST RIVER STREET	PROPOSED ABANDONMENT (PORTION)
NORTH BURIAL GROUND	NEW SECTION LAYOUT
FONES ALLEY	PROPOSED ABANDONMENT (PORTION)
BELMONT AVENUE	PROPOSED ABANDONMENT (PORTION)
SMART STREET	PROPOSED ABANDONMENT (PORTION)
OXFORD STREET	CROSS - SECTION
OXFORD STREET	LAND REQUIRED FOR HIGHWAY
NORTH BURIAL GROUND	NEW SECTION LAYOUT

PLEASANT VALLEY PARKWAY	STUDY PLAN
DYER STREET	PROPOSED ABANDONMENT (PORTION)
ORANGE STREET	PROPOSED ABANDONMENT (PORTION)
LEGG STREET	PROPOSED ABANDONMENT
IMPERIAL PLACE	LAND DEEDED FOR HIGHWAY
GARFIELD AVENUE	PROPOSED SALE
CAMP STREET	PROPOSED ABANDONMENT (PORTION)
MYRA STREET	LOCATION PLAN
NORTH BURIAL GROUND	NEW SECTION LAYOUT
CHALKSTONE AVENUE	PROPOSED SALE
MYRA STREET	PROPOSED ABANDONMENT (PORTION)
ALLENS AVENUE	PROPOSED EASEMENT
MARY STREET	PROPOSED ABANDONMENT
ALLENS AVENUR	PROPOSED PURCHASE
SUNSET AVENUE	PROPOSED SALE

NEW PLANS WERE DRAWN DURING THE YEAR TO ASSIST THE CITY COUNCIL IN CONSIDERATION OF PROPOSED CHANGES IN THE ZONING MAPS AS PETITIONED BY VARIOUS PERSONS. THE FOLLOWING AMENDMENTS WERE APPROVED:

DOUGLAS AVENUE  
 MOWRY AND CLYM STREETS  
 HARTFORD AVENUE AND FLOWER STREET  
 ADMIRAL STREET  
 MANTON AVENUE  
 CORTEZ AND LEANDER STREETS  
 LUBEC AND MANILA STREETS  
 JOSEPH STREET  
 EAST PARK AND BRONX STREETS  
 BROAD STREET  
 REYNOLDS AND POTTERS AVENUE .  
 BROAD STREET  
 BRANCH AVENUE AND VEAZIE STREET  
 BROADWAY  
 ALMY, MARSHALL AND COURTLAND STREET  
 SALMON STREET

DESCRIPTIONS OF THE ABOVE APPROVED CHANGES WERE DRAFTED AND FURNISHED THE ZONING OFFICE FOR INCORPORATION IN THE ORDINANCES.

FIFTEEN PLANS WERE DRAWN FOR AMENDMENTS TO THE ZONING ORDINANCE THAT FAILED OF PASSAGE.

#### NORTH BURIAL GROUND

DURING THE YEAR 44 DEEDS TO LOTS CONVEYED BY THE CITY AND 45 CERTIFICATES OF PERPETUAL CARE HAVE BEEN DRAWN. DESCRIPTIONS OF THE LOTS WERE FURNISHED THE SUPERINTENDENT, FIELD SURVEYS WERE MADE AND LOTS STAKED OUT ON THE GROUND WHEN REQUESTED. ELEVATIONS WERE TAKEN AND SURVEYS WERE MADE FOR THE DEVELOPMENT OF TWO SECTIONS AT THE REQUEST OF THE SUPERINTENDENT.

#### GENERAL

DURING THE YEAR THE FOLLOWING WORK OF A SPECIAL NATURE WAS COMPLETED:

ELEVATIONS WERE TAKEN AND PLANS MADE FOR IMPROVEMENTS AT DUDLEY STREET PLAYGROUND.

SURVEYS WERE MADE AND GRADES MARKED ON SITE OF NEW SCHOOL AND PLAYGROUND AT CAMDEN AVENUE AND DANFORTH STREET.

SURVEYS AND PLANS WERE MADE AND CROSS-SECTIONS WERE TAKEN ON SITE OF NEW MARY E. FOGARTY ELEMENTARY SCHOOL.

SURVEYS WERE MADE FOR LEASES OF CITY-OWNED LAND AT FIELDS POINT.

ELEVATIONS WERE TAKEN AND BATTER BOARDS SET FOR CONSTRUCTION OF AUXILLIARY BUILDINGS ON SITE OF NEW PUBLIC WORKS GARAGE AT FIELDS POINT.

VARIOUS STREET LOCATIONS WERE GIVEN TO ASSIST THE NARRAGANSETT ELECTRIC CO. AND THE TELEPHONE CO. IN SETTING NEW POLES.

SURVEYS WERE MADE AND PLANS DRAWN FOR PROPOSED STREET WIDENINGS.

SURVEYS AND PLANS WERE MADE AND CROSS-SECTIONS WERE TAKEN AT NEW PLAYGROUND SITE AT NARRAGANSETT AVENUE.

A SURVEY FOR LOCATION OF SHORE LINE AT FIELDS POINT.

LOCATION SURVEYS WERE MADE AND PLANS DRAWN OF PORTIONS OF NEUTACONKANUT PARK, TRIGGS PARK AND PLEASANT VALLEY PARKWAY.

TITLE RESEARCH WORK WAS MADE ON VARIOUS PARCELS OF LAND IN THE CITY'S INTEREST.

MEASUREMENTS WERE TAKEN AND PLANS MADE FOR PUBLIC BUILDINGS DEPARTMENT FOR SIDEWALK CONSTRUCTION ESTIMATES.

MEASUREMENTS WERE TAKEN AND PLANS DRAWN TO ASSIST THE POLICE DEPARTMENT IN ACCIDENT AND MURDER CASES.

THE ANNUAL CHART SHOWING THE INCIDENCE OF CERTAIN CONTAGIOUS DISEASES WAS PREPARED FOR THE USE OF THE HEALTH DEPARTMENT.

THE ANNUAL TABULATION OF ALL REAL ESTATE OWNED BY THE CITY, SHOWING THE SEVERAL CLASSIFICATIONS ACCORDING TO USAGE, INCLUDING CURRENT VALUATIONS FURNISHED BY THE CITY ASSESSOR WAS PREPARED AND GIVEN TO THE CITY CONTROLLER FOR INCLUSION IN THE CONTROLLER'S ANNUAL REPORT.

RESOLUTIONS WERE DRAFTED FOR THE CITY COUNCIL, COVERING ALL ACTIONS RELATING TO THE ACCEPTANCE AND ABANDONMENT OF STREETS, DEFINING GRADES AND GRADING AND CURBING STREETS.

PLATS PRESENTED FOR RECORD HAVE BEEN COMPARED FOR THE RECORDER OF DEEDS OFFICE AND PLATS FOR RECORDING HAVE BEEN FURNISHED THE RECORDER'S OFFICE UNDER THE PROVISIONS OF CHAPTER 987 AND 2118 OF THE PUBLIC LAWS.

DESCRIPTIONS OF LAND TAKEN BY CONDEMNATION FOR HIGHWAYS AND PARK PURPOSES AND FOR INCORPORATION IN DEEDS OF LAND PURCHASED OR SOLD, LEASES AND RIGHTS-OF-WAY TO AND FROM THE CITY, THE METHODS BY WHICH VARIOUS PROPERTIES WERE ACQUIRED, THE PURPOSE OF ORIGINAL PURCHASE AND PRESENT STATUS WERE FURNISHED TO THE LAW DEPARTMENT AND OTHER ASSISTANCE RENDERED AS REQUESTED.

ENGINEERING ASSISTANCE WAS GIVEN TO THE PUBLIC BUILDINGS DIVISION, POLICE DEPARTMENT, CITY PLAN COMMISSION, TRAFFIC DIVISION, BOARD OF CANVASSERS, CITY CLERK'S OFFICE, TAX ASSESSOR'S OFFICE AND REDEVELOPMENT AGENCY, FROM TIME TO TIME.

THE R. I. POLK MAP AND OTHER MAPS OF THE CITY PUBLISHED BY VARIOUS COMPANIES WERE REVISED AS TO CHANGES IN STREET NAMES AND POINTS OF INTEREST, NEW STREET ADDITIONS OF ABANDONMENTS OF EXISTING STREETS AND THE MAPS RETURNED TO THE PUBLISHERS.

#### HIGHWAY SECTION

WORK PERFORMED IN GENERAL IS AS FOLLOWS:

ESTIMATES OF THE COST OF MAKING IMPROVEMENTS, CONSISTING OF DRIVEWAYS, FURNISHING AND SETTING CURBING, RELAYING PAVEMENTS IN DRIVEWAYS, CHANGING CURB AS DESIRED BY INDIVIDUALS OR CORPORATIONS, WERE FURNISHED THE DIRECTOR OF PUBLIC WORKS.

BUILDING NOTICES. GRADES EITHER PROPOSED, DEFINED OR ESTABLISHED HAVE BEEN MARKED ON THE GROUND FOR PARTIES INTENDING TO BUILD ON TWELVE STREETS COVERING SIXTEEN APPLICATIONS.

CURBING. LINES AND GRADES HAVE BEEN MARKED OUT FOR RESETTING CURBING AND PAVING GUTTERS IN PORTIONS OF STREETS AS REQUESTED.

PROFILES. PROFILES OF SUNDRY STREETS, APPROXIMATELY 1.179 MILES HAVE BEEN MADE FOR THE PURPOSE OF DEFINING GRADES. THE CONTOURS OF THE CENTER AND SIDE LINES ARE SHOWN AT FIFTY FOOT STATIONS, ALSO THE LEVELS OF THE SILLS AND GROUND LINES OF THE HOUSES ADJOINING THE STREETS. THE PROFILE PLANS INCLUDE PLAN VIEWS WITH PROPERTY LINES AND HOUSES SHOWN.

STREET GRADING. ABUTTING OWNERS: GRADES IN SUNDRY STREETS HAVE BEEN MARKED OUT AT INTERVALS OF ABOUT FIFTY FEET FOR STREET GRADING OR FOR THE BENEFIT OF INDIVIDUALS OWNING ABUTTING PROPERTY.

ASSESSMENTS. THE HIGHWAY SECTION COMPUTES ASSESSMENTS FOR CURBING AND GRADING.

PLANS AND SPECIFICATIONS, ENGINEERING FIELD WORK AND INSPECTION WERE FURNISHED FOR THE CONSTRUCTION OR THE RECONSTRUCTION OF THE FOLLOWING STREETS BY THE CONSTRUCTION AND MAINTENANCE DIVISION, HIGHWAY SECTION.

<u>STREET</u>	<u>TYPE-BITUMINOUS CONCRETE</u>	<u>SQ. YDS.</u>
ADA AVENUE	RUSHMORE AVENUE TO BRUSH HILL ROAD	939
BISMARCK STREET	JOB STREET TO SILVER SPRING STREET	2973
BRUSH HILL ROAD	ADA AVENUE TO MANTON AVENUE	3040
CARLETON STREET	ATWELLS AVENUE TO CHAUCER STREET	3911
CHACE AVENUE	HOPE STREET TO EAST LINE WEST VIEW PLAT	3752
CHAD BROWN STREET	150 FT. EAST OF MARCH STREET TO DOUGLAS AVENUE	1733
CHAD BROWN STREET	DOUGLAS AVENUE TO PINEHURST AVENUE	4722
EAST ORCHARD AVENUE	BUTLER AVENUE TO PARKSIDE ROAD	3167
EAST RIVER STREET	WATERMAN STREET TO PITMAN STREET	1976
ELEVENTH STREET	HOPE STREET TO TOP STREET	2479
FAIROAKS AVENUE	ELMHURST AVENUE TO ROSLYN AVENUE	641
HART STREET	HOPE STREET TO IVY STREET	1677
HOMEFIELD AVENUE	MT. PLEASANT AVENUE TO BASSWOOD AVENUE	2483
HUMBOLDT AVENUE	ARLINGTON AVENUE TO WAYLAND AVENUE	5298
HUNNEWELL AVENUE	MANTON AVENUE TO POINT NORTH OF ADA AVENUE	3738

<u>STREET</u>	<u>TYPE-BITUMINOUS CONCRETE</u>	<u>SQ. YDS.</u>
IRVING AVENUE	ARLINGTON AVENUE TO TADER AVENUE	1052
JASTRAM STREET	WHITFORD AVENUE TO PLEASANT VALLEY PARKWAY	4660
JOB STREET	LEDGE STREET TO SMART STREET	3723
JUSTICE STREET	ACADEMY AVENUE TO PLEASANT VALLEY PARKWAY	1107
LARCH STREET	MORRIS AVENUE TO CAMP STREET	4695
LORRAINE AVENUE	LLOYD AVENUE TO CAMP STREET	977
LYNCH STREET	VALE STREET TO CHALKSTONE AVENUE	5309
MAUDE STREET	SMITH STREET TO CONVENT STREET	648
MONGENAI'S STREET	ATWELLS AVENUE TO TERMINATION	1048
NIAGARA STREET	EARLY STREET TO SACKETT STREET	1420
O'NEIL STREET	DOUGLAS AVENUE TO VEAZIE STREET	1302
ORCHARD AVENUE	BUTLER AVENUE TO WAYLAND AVENUE	4800
PARKSIDE ROAD	ANGELL STREET TO POINT NORTH OF E. ORCHARD AVENUE	2033
PLANET STREET	SOUTH WATER STREET TO BENEFIT STREET	1192
POMONA AVENUE	ERASTUS STREET TO ACADEMY AVENUE	5318
POWER STREET	SOUTH MAIN STREET TO GAND STREET	11867
PROSPECT STREET	ANGELL STREET TO OLNEY STREET	7967
PUTNAM STREET	ATWELLS AVENUE TO APPLETON STREET	5425
RADCLIFFE AVENUE	EATON STREET TO SMITH STREET	5180
RING STREET	KNIGHT STREET TO TOBEY STREET	3810
RUSHMORE AVENUE	MANTON AVENUE TO ADA AVENUE	3260
SALINA STREET	HAWKINS STREET TO SUFFOLK STREET	5392
SEARS AVENUE	ATWELLS AVENUE TO RANGELEY AVENUE	1307
SISSON STREET	MANTON AVENUE TO CLOUD STREET	3090
STEUBEN STREET	MANTON AVENUE TO ATWELLS AVENUE	2240
TENTH STREET	HOPE STREET TO HIGHLAND AVENUE	4021
TRANSIT STREET	SOUTH MAIN STREET TO EAST STREET	5609
TWELFTH STREET	HOPE STREET TO TOP STREET	2629
WINDMILL STREET	LEDGE STREET TO NORTH LINE SCHOOL PROPERTY	2667
WOODBINE STREET	CAMP STREET TO IVY STREET	1653
YOUNG ORCHARD AVENUE	HOPE STREET TO GOVERNOR STREET	2120
	<b>TOTAL</b>	<b>151,098</b>

PLANS AND SPECIFICATIONS, ENGINEERING FIELD WORK AND INSPECTION WERE FURNISHED FOR THE GRADING, CURBING, AND CONSTRUCTION OF THE FOLLOWING STREETS.

<u>STREET</u>	<u>TYPE-BITUMINOUS CONCRETE</u>	<u>SQ. YDS.</u>
AINSWORTH STREET	DOUGLAS AVENUE TO CAXTON STREET	591
APPIAN STREET	NORTH LINE CORINA STREET WEST OF APPIAN STREET TO NORTH LINE CORINA STREET EAST OF APPIAN STREET	200
BINGHAM STREET	BRANCH AVENUE TO CAXTON STREET	508
CARDER STREET	CAXTON STREET TO NORTH LINE OF BURTON STREET	588
CAXTON STREET	EAST LINE CARDER STREET TO WEST LINE OF AINSWORTH STREET	1085
CORINA STREET	EAST LINE APPIAN STREET TO GLASGOW STREET	1011
ELIZA STREET	HARTFORD AVENUE TO NORTH LINE OF THORNTON STREET	1495
GARIBALDI AVENUE	LANGDON STREET TO STANHOPE STREET	1113
GLASGOW STREET	CORINA STREET TO HAWKINS STREET	1130
GLASGOW STREET	HAWKINS STREET TO SALINA STREET	1350
JOSA STREET	LANGDON STREET TO CITY LINE	433
LABAN STREET	END OF CURBED PORTION TO PLAINFIELD STREET	1157
LONGFELLOW TERRACE	LONGFELLOW STREET TO ROGER WILLIAMS AVENUE	2073
MANILA STREET	BURNS STREET TO CITY LINE	820
McMILLEN STREET	ASCHAM STREET TO PORTION CURBED	746
RIVERDALE STREET	MANTON AVENUE TO NORTHERLY TERMINATION	720
ROGER WILLIAMS AVENUE	ELMWOOD AVENUE TO MELROSE STREET	2846
SMART STREET	ARGOL STREET TO WEST LINE JOB STREET	1152
THURSTON STREET	ELMWOOD AVENUE TO WESTERLY TERMINATION	977
WADSWORTH STREET	SORRENTO STREET TO EXPRESSWAY SERVICE ROAD	1522
WINDMILL STREET	PORTION BUILT TO CITY LINE	3365
	<b>TOTAL UNDER CONTRACT TO M.A.GAMMINO CONSTRUCTION CO.</b>	<b>224,962</b>
SUNBURY STREET	GLOUCESTER STREET TO RIVER AVENUE	523
	<b>TOTAL BY CITY</b>	<b>523</b>
ATWOOD STREET	UNION AVENUE TO WALLACE STREET	2795
CASS STREET	RUGBY STREET TO EDDY STREET	1485
CLOUD STREET	SISSON STREET TO UNIT STREET	473
DRESSER STREET	MELISSA STREET TO EAST LINE FLOWER STREET	3204
ELLENFIELD STREET	WEST LINE VIRGINIA AVENUE TO BAKER STREET	1743
FREEDOM ROAD	OAKWOOD AVENUE WESTERLY AND NORTHERLY TO PORTION RECEIVED	1594
HALTON STREET	POTTERS AVENUE TO HUNTINGTON AVENUE	1650
HARMONY DRIVE	POINT 200 FT SOUTH OF CHALKSTONE AVENUE TO FREEDOM ROAD	795
HUNNEWELL AVENUE	POINT 200 FT SOUTH OF ADA AVENUE TO CHALKSTONE AVENUE	2478
OAKWOOD AVENUE	NORTH LINE OF FREEDOM ROAD TO POINT 200 FT SOUTHERLY	541
RICHLAND STREET	EDGEMERE AVENUE TO SOUTH LINE OF FAIRFIELD AVENUE	544
RIDGEWAY AVENUE	MANTON AVENUE TO POINT 234.2 FT EASTERLY	664
ST. THOMAS STREET	FRUIT HILL AVENUE TO TARANTO STREET	885

SYDARIS STREET	RUSHMORE AVENUE TO SISSON STREET	1027
WALLACE STREET	CUMERFORD STREET TO ATWOOD STREET	<u>1017</u>
	TOTAL UNDER CONTRACT TO NARRAGANSETT IMPROVEMENT CO.	20,897

RECAPITULATION

BY M.A. GAMMINO CONSTRUCTION CO.	24,962
BY CITY	523
BY NARRAGANSETT IMPROVEMENT CO.	<u>20,897</u>

TOTAL FOR STREETS GRADED, CURBED AND CONSTRUCTED WITH BITUMINOUS CONCRETE 48,382

CONSTRUCTION WAS IN PROGRESS IN THE FOLLOWING STREETS ON SEPTEMBER 30, 1960

ACORN STREET	ATWELLS AVENUE TO CEDAR STREET
ALDEN STREET	SAMOSSET AVENUE TO VICTORIA STREET
ALMY STREET	WESTMINSTER STREET TO GESLER STREET
ALVERSON AVENUE	HARTFORD AVENUE TO PLAINFIELD STREET
AMITY STREET	ACADEMY AVENUE TO PEMBERTON STREET
CEDAR STREET	BRADFORD STREET TO ABORN STREET
CORNWELL STREET	SOUTH LINE LONGMONT STREET TO NORTH LINE CHESHIRE STREET
CURTIS STREET	BOSWORTH STREET TO SHERIDAN STREET
FARMINGTON AVENUE	PLAINFIELD STREET TO CITY LINE
FRANK CERDO SQUARE	
GRAFTON STREET	METCALF STREET TO CHATHAM STREET
HUXLEY AVENUE	EATON STREET TO SMITH STREET
IMPERIAL PLACE	BASSETT STREET TO SOUTH STREET
JASTRAM STREET	WHITFORD AVENUE TO SMITH STREET
LONGFELLOW STREET	ELMWOOD AVENUE TO WESTERLY TERMINATION
LOWELL AVENUE	PLAINFIELD STREET TO HARTFORD AVENUE
LINWOOD AVENUE	CRANSTON STREET TO DEXTER STREET
NAHANT STREET	OPPER STREET TO RUSSO STREET
NEWCOMB STREET	COGGESHALL STREET TO FORSYTH STREET
POCASSET AVENUE	WEBSTER AVENUE TO CITY LINE
RUSSO STREET	SOCIAL STREET TO PAUL STREET
SHAFTER STREET	TERRACE AVENUE TO LAUREL HILL AVENUE
WARDLAW AVENUE	RIVER AVENUE TO POINT WESTERLY

FOLLOWING IS A LIST OF UNIMPROVED STREETS ORDERED BUILT BY CITY COUNCIL RESOLUTION, CONSTRUCTION OF WHICH HAS NOT COMMENCED:

<u>STREET</u>		<u>OURD ORDERED</u>	<u>LENGTH IN FEET</u>
ARGOL STREET	EDGEWORTH AVENUE TO CITY LINE	AUG. 6, 1960	76
CRARY STREET	ALLENS AVENUE TO EAST LINE UNNAMED STREET	DEC. 5, 1940	276
CUTLER STREET	NEWARK STREET TO ATWELLS AVENUE	AUG. 7, 1952	206
DOVE STREET	OAKLAND AVENUE TO MALBONE STREET	AUG. 5, 1960	218
DOROTHY AVENUE	LANGDON STREET TO WEST LINE ROBIN BROOK	MAY 10, 1956	520
JOY STREET	RIVER AVENUE TO WESTERLY TERMINATION	DEC. 6, 1954	400
LAWN STREET	BOLTON AVENUE TO GLOVER STREET	MAY 6, 1960	176
LEHIGH STREET	POE STREET TO ALLENS AVENUE	APR. 8, 1955	478
LONGWOOD AVENUE	NORTH LINE KENTLAND AVENUE TO CITY LINE	MAY 6, 1960	197
MYSTIC STREET	PRAIRIE AVENUE TO EASTERLY TERMINATION	AUG. 5, 1960	460
POE STREET	SEYMOUR STREET TO LEHIGH STREET	APR. 8, 1955	220
REDWOOD DRIVE	CITY LINE AT LONGWOOD AVENUE TO CITY LINE AT ROYAL AVENUE	MAY 6, 1960	301
ROYAL AVENUE	GENTIAN AVENUE TO CITY LINE	MAY 6, 1960	305
SMART STREET	JOB STREET TO POINT WESTERLY	NOV. 6, 1959	208
SYRACUSE STREET	LAUREL HILL AVENUE TO EASTERLY TERMINATION	AUG. 5, 1960	108
TRAINOR STREET	ACORN STREET TO DEPASQUALE AVENUE	JUNE 20, 1935	249
UNNAMED PLATTED STREET	CRARY STREET TO GLOBE STREET	DEC. 5, 1940	<u>117</u>
	TOTAL		4515

PETITIONS TO HAVE GRADE DEFINED

<u>DATE</u>	<u>STREET AND LOCATION</u>
JAN. 20, 1955	ADIE STREET, FROM ATWELLS AVENUE TO CEDAR STREET
FEB. 17, 1955	OPHELIA STREET, FROM HARTFORD AVENUE TO ELIZA STREET
JUNE 2, 1955	AUMOND STREET, FROM EDGEWOOD BLVD. TO CITY LINE
JULY 7, 1955	VESPUCCI STREET, FROM DOUGLAS AVENUE TO FERNANDO STREET
AUG. 4, 1955	POE STREET, FROM OXFORD STREET TO SEYMOUR STREET
SEPT. 1, 1955	QUEEN STREET, FROM LAUREL HILL AVENUE TO ITS NORTHERLY TERMINATION
NOV. 3, 1955	HYMER STREET, FROM CRANDALL STREET TO SEAMANS STREET
DEC. 1, 1955	DERRY STREET, FROM OREGON STREET TO GEOFFREYS COURT
MAY. 3, 1956	STUKELY STREET, FROM HARTFORD AVENUE TO #41 STUKELY STREET
MAY 3, 1956	WESTMORE STREET, FROM NIAN TIC AVENUE TO LAKEVIEW DRIVE
JUNE 7, 1956	MONTICELLO STREET, FROM OPFER STREET TO ROBIN BROOK SEWER
AUG. 2, 1956	INDIA STREET, FROM FARMINGTON AVENUE TO ITS TERMINATION

SEPT.	6,1956	MINNESOTA STREET, FROM WOODWARD ROAD TO ITS TERMINATION
OCT.	4,1956	BERKSHIRE STREET, FROM SALINA STREET TO CORNWALL STREET
FEB.	7,1957	MARIA STREET, FROM KILLINGLY STREET TO CITY LINE
APR.	18,1957	STELLA STREET, FROM BARBARA STREET TO TERMINATION
MAY	16,1957	CORSICIA STREET, FROM FRUIT HILL AVENUE TO GENOA STREET
MAY	16,1957	GENOA STREET, FROM FRUIT HILL AVENUE TO TARANTO STREET
JUNE	6,1957	POE STREET, FROM MUTUAL STREET TO OXFORD STREET
JULY	11,1957	HILLARD STREET, FROM MANTON AVENUE TO PELHAM STREET
JULY	11,1957	COWPER COURT, FROM MESSER STREET TO TERMINATION
AUG.	15, 1957	GROTTO AVENUE, FROM UPTON AVENUE TO PORTION ALREADY RECEIVED
OCT.	3,1957	DUKE STREET, FROM ORMS STREET TO SMITH STREET
DEC.	19,1957	KING PHILIP STREET, FROM BARBARA STREET TO GRIMWOOD STREET
APR.	7,1958	PLEASANT VIEW AVENUE, FROM BURRINGTON STREET TO TERMINATION
MAY	1,1958	YORK STREET, FROM NORTH MAIN STREET TO STEEL STREET
JULY	3,1958	PROCTOR PLACE, FROM DOYLE AVENUE TO TERMINATION
AUG.	7,1958	PACIFIC AVENUE, FROM BARNABY STREET TO TERMINATION
AUG.	7,1958	SEDAN STREET, FROM ARGOL STREET TO TERMINATION
SEP.	4,1958	YORKTOWN PLACE, FROM LINTON STREET TO TERMINATION
NOV.	6,1958	MYRA STREET, KILLINGLY STREET TO BOUNDARY AVENUE
FEB.	19,1959	DEERFIELD TERRACE, FROM ALGER AVENUE TO TERMINATION
MAR.	5,1959	SIDLEY STREET, FROM CRESCENT STREET TO WEST TERMINATION
APR.	2,1959	NYE STREET, FROM IDA STREET TO MERINO STREET
APR.	16,1959	STELLA STREET, FROM BARBARA STREET TO GRIMWOOD STREET
JULY	2,1959	BATTERSON STREET, FROM WALSH STREET TO BULLOCK AVENUE
JULY	2,1959	BULLOCK AVENUE FROM BATTERSON STREET TO CITY LINE
JULY	2,1959	HENNESSEY STREET, FROM SAINT THOMAS STREET TO BULLOCK AVENUE
JULY	2,1959	ROWLEY STREET, FROM BATTERSON STREET TO HENNESSEY STREET
JULY	2,1959	TRIGGS STREET, FROM WALSH STREET TO BULLOCK AVENUE
JULY	2,1959	WALSH STREET, FROM BATTERSON STREET TO HENNESSEY STREET
SEPT.	3,1959	ACKERMAN STREET, FROM NIAN TIC AVENUE TO EAST TERMINATION
SEPT.	3,1959	BINNEY STREET, FROM NIAN TIC AVENUE TO EAST TERMINATION
OCT.	1,1959	CHRISTOPHER STREET, FROM CHARLES STREET TO WINDMILL STREET
OCT.	1,1959	DAKOTA STREET, FROM WOODWARD ROAD TO ITS TERMINATION
JAN.	21,1960	JOSEPH STREET, FROM LUBEC STREET TO RIGHT-OF-WAY
MAR.	3,1960	WAYLAND AVENUE, FROM PITMAN STREET TO ITS SOUTHERLY TERMINATION
MAR.	3,1960	TOGANSETT ROAD, FROM NIAN TIC AVENUE TO LAKEVIEW DRIVE
MAR.	3,1960	UNNAMED GANGWAY FROM PETER STREET TO LEDGE STREET
SEPT.	1,1960	OWEN STREET, FROM MANTON AVENUE TO KING STREET

PETITIONED FOR CURBING AND GRADING

<u>DATE</u>	<u>STREET AND LOCATION</u>	
FEB.	17,1955	OPHELIA STREET, FROM HARTFORD AVENUE TO ELIZA STREET
MAY	5,1955	PARK ROW, FROM EDGEWOOD BOULEVARD SOUTHERLY TO CRANSTON CITY LINE
JUNE	2,1955	AUMOND STREET, FROM EDGEWOOD BOULEVARD TO CITY LINE
JULY	7,1955	VESPUCCI STREET, FROM DOUGLAS AVENUE TO FERNANDO STREET
JULY	7,1955	HILLCREST AVENUE, FROM SOUTH LINE FREEDOM ROAD TO S. LINE CARVEL ST.
AUG.	4,1955	POE STREET, FROM OXFORD STREET TO SEYMOUR STREET
SEPT.	1,1955	QUEEN STREET, FROM LAUREL HILL AVE. TO ITS NORTHERLY TERMINATION
NOV.	3,1955	HYMER STREET, FROM GRANDALL STREET TO SEAMANS STREET
DEC.	1,1955	DERRY STREET, FROM OREGON STREET TO GEOFFREYS COURT
MAY	3,1956	STUKELY STREET, FROM HARTFORD AVENUE TO #41 STUKELY STREET
MAY	3,1956	WESTMORE STREET, FROM NIAN TIC AVENUE TO LAKEVIEW DRIVE
AUG.	2,1956	LIDIA STREET, FROM FARMINGTON AVENUE TO ITS TERMINATION
OCT.	4,1956	BERKSHIRE STREET, FROM SALINA STREET TO CORNWALL STREET
NOV.	1,1956	ACKERMAN STREET, FROM NIAN TIC AVENUE TO EASTERLY TERMINATION
NOV.	1,1956	DUPONT STREET, FROM NIAN TIC AVENUE TO EASTERLY TERMINATION
NOV.	1,1956	BINNEY STREET, FROM NIAN TIC AVENUE TO EASTERLY TERMINATION
NOV.	1,1956	DAY STREET, FROM NIAN TIC AVENUE TO EASTERLY TERMINATION
NOV.	1,1956	BINGHAM STREET, FROM BRANCH AVENUE TO DOUGLAS AVENUE
NOV.	15,1956	BURTON STREET, FROM GINGHAM STREET TO TERMINATION
FEB.	7,1957	MARIA STREET, FROM KILLINGLY STREET TO CITY LINE
MAY	2,1957	HAGAN STREET, FROM CHARLES STREET TO LANGDON STREET
JUNE	6,1957	POE STREET, FROM MUTUAL STREET TO OXFORD STREET
JULY	11,1957	HILLARD STREET, FROM MANTON AVENUE TO PELHAM STREET
JULY	11,1957	COWPER COURT, FROM MESSER STREET TO TERMINATION
JULY	11,1957	SMART STREET, FROM ARGOL STREET TO TERMINATION
AUG.	15,1957	GROTTO AVENUE, FROM UPTON AVENUE TO PORTION ALREADY RECEIVED
OCT.	3,1957	DUKE STREET FROM ORMS STREET TO SMITH STREET
DEC.	19,1957	KING PHILIP STREET, FROM BARBARA STREET TO GRIMWOOD STREET
FEB.	20,1958	CARVER COURT, FROM 53 PLEASANT STREET TO CARVER COURT
APR.	17,1958	PLEASANT VIEW AVENUE, FROM BURRINGTON STREET TO TERMINATION
MAY	1,1958	YORK STREET, FROM NORTH MAIN STREET TO STEELE STREET
JULY	3,1958	PROCTOR PLACE, FROM DOYLE AVENUE TO TERMINATION
AUG.	7,1958	PACIFIC AVENUE, FROM BARNABY STREET TO TERMINATION
SEPT.	4,1958	YORKTOWN PLACE, FROM LINTON STREET TO TERMINATION
SEPT.	18,1958	TAPPAN STREET, FROM HAWKINS STREET TO ADMIRAL STREET
NOV.	6,1958	MYRA STREET, FROM KILLINGLY STREET TO BOUNDARY AVENUE

MAR.	5,1959	SIBLEY STREET, FROM CRESCENT STREET TO WEST TERMINATION
APR.	16,1959	STELLA STREET, FROM BARBARA STREET TO GRIMWOOD STREET
MAY	7,1959	PACIFIC AVENUE, FROM AQUIDNECK STREET TO BECKWITH STREET
JULY	2,1959	BATTERSON STREET, FROM WALSH STREET TO BULLOCK AVENUE
JULY	2,1959	BULLOCK AVENUE, FROM BATTERSON STREET TO CITY LINE
JULY	2,1959	HENNESSEY STREET, FROM SAINT THOMAS STREET TO BULLOCK AVENUE
JULY	2,1959	ROWLEY STREET, FROM BATTERSON STREET TO HENNESSEY STREET
JULY	2,1959	TRIGGS STREET, FROM WALSH STREET TO BULLOCK AVENUE
JULY	2,1959	WALSH STREET, FROM BATTERSON STREET TO HENNESSEY STREET
JULY	2,1959	PACIFIC AVENUE, FROM ACQUIDNECK STREET TO BECKWITH STREET
OCT.	1,1959	CHRISTOPHER STREET, FROM CHARLES STREET TO WINDMILL STREET
JAN.	21,1960	JOSEPH STREET, FROM LUBEC STREET TO RIGHT-OF-WAY
MAR.	3,1960	WAYLAND AVENUE, FROM PITMAN STREET TO ITS SOUTHERLY TERMINATION
MAR.	3,1960	TOGANSETT ROAD FROM NJANTIC AVENUE TO LAKEVIEW DRIVE
MAR.	3,1960	UNNAMED GANGWAY, FROM PETER STREET TO LEDGE STREET

SUMMARY TO OCTOBER 1,1960

THE FOLLOWING TABLE SHOWS TYPE OF PAVEMENT, LENGTHS AND AREAS:

<u>TYPES OF PAVEMENT</u>	<u>LENGTHS MILES</u>	<u>AREA SQUARE YARDS</u>
REINFORCED CONCRETE	0.17	3,101.3
BITUMINOUS CONCRETE (CURBED)	131.16	2,265,629.8
BITUMINOUS CONCRETE (NOT CURBED)	5.02	102,572.0
SHEET ASPHALT (CURBED)	68.52	1,659,680.9
SHEET ASPHALT (NOT CURBED)	0.30	4,195.0
BITUMINOUS MACADAM (CURBED)	150.76	2,306,515.3
BITUMINOUS MACADAM (NOT CURBED)	3.12	50,512.0
ASPHALT BLOCKS	0.14	1,555.4
BRICK	0.02	197.2
COBBLE	0.24	1,706.9
GRANITE BLOCKS	2.83	43,910.3
WATERBOUND MACADAM (CURBED)	2.33	39,970.0
WATERBOUND (NOT CURBED)	0.58	6,237.0
	365.99	6,485,783.1
RECEIVED (NOT IMPROVED)	3.33	
TOTAL	369.32	

THE FOLLOWING WORK HAS BEEN COMPLETED DURING THE YEAR - NAMELY:

STREETS PAVED WITH NEW MATERIAL	68,659 LINEAR FEET
BITUMINOUS CONCRETE PAVEMENT LAID	203,836 SQUARE YARDS

SEWER AND STRUCTURAL SECTION

THE DUTIES OF THIS SECTION CONSISTS OF THE PREPARATION OF STUDIES, PLANS, SPECIFICATIONS AND ESTIMATES OF PROPOSED SANITARY AND STORM SEWERS, PREPARATION OF STUDIES, PLANS, SPECIFICATIONS AND ESTIMATES OF PROPOSED MISCELLANEOUS STRUCTURES AND THE FIELD ENGINEERING AND INSPECTION WORK OF ALL ABOVE PROJECTS IN PROGRESS AND THE COMPUTATION OF FINAL PAYMENTS TO CONTRACTORS.

ALL RECORDS ON THE ABOVE ARE FILED FOR FUTURE REFERENCE AND ALL FIELD RECORD BOOKS ARE FILED IN FIRE-PROOF CABINETS. PLANS ARE MADE ON CLOTH-MOUNTED DRAWING PAPER OF ALL SEWER CONSTRUCTION AND ALL HOUSE DRAINAGE CONNECTIONS ARE PLATTED ON THESE PLANS.

FIELD MEASUREMENTS WERE MADE IN SEWERS PERIODICALLY, IN ORDER TO COMPUTE THE SEWAGE FLOW FROM NORTH PROVIDENCE.

A CONTRACT FOR SEWERS IN VARIOUS STREETS BY D'ERCOLE CONSTRUCTION CO. INC. DATED MAY 25, 1959 WAS COMPLETED OCTOBER 13, 1959. FINAL COST EQUALED \$85,898.39. THE STREETS INVOLVED ARE AS FOLLOWS WITH COMPLETION DATES NOTED:

<u>COMPLETION DATES</u>	<u>DESCRIPTION</u>
OCT. 7, 1959	NEWCOMB STREET, FROM NEAR FORSYTH STREET TO COGGESHALL STREET
AUG. 10, 1959	PLEASANT VIEW AVENUE, FROM NEAR PACIFIC AVENUE TO BURRINGTON STREET
JUNE 23, 1959	RUSSO STREET, FROM NEAR SOCIAL STREET TO PAUL STREET
SEPT.16, 1959	CASS STREET, FROM NEAR RUGBY STREET TO EDDY STREET
JUNE 26, 1959	NAHANT STREET, FROM NEAR RUSSO STREET TO OPPER STREET
SEPT.29, 1959	SMART STREET, FROM APPROXIMATELY 200 FEET WEST OF JOB STREET TO JOB STREET
SEPT.25, 1959	SYBARIS STREET, FROM NEAR RUSHMORE AVENUE TO SISSON STREET
AUG. 20, 1959	AMITY STREET, FROM NEAR PEMBERTON STREET TO ACADEMY AVENUE
JULY 16, 1959	ATWOOD STREET, FROM NEAR WALLACE STREET TO UNION AVENUE
JULY 1, 1959	WARDLAW AVENUE, FROM NEAR RIVER AVENUE TO STONELAW AVENUE
SEPT.22, 1959	ALDEN STREET, FROM NEAR SAMOSET AVENUE TO VICTORIA STREET
OCT. 13,1959	DEERFIELD TERRACE, FROM ITS WESTERLY TERMINATION TO ALGER AVENUE

A CONTRACT FOR SEWERS IN VARIOUS IN VARIOUS STREETS BY THE FANNING & DOORLEY CONST. CO., INC. DATED MAY 2, 1960 IS NOW IN CONSTRUCTION. THE STREETS INVOLVED ARE AS FOLLOWS WITH THE COMPLETION DATES NOTED. ESTIMATED VALUE OF THE WORK DONE TO DATE EQUALS \$68,152.85. TOTAL CONTRACT WORK WILL APPROXIMATE \$87,243.50.

<u>COMPLETION DATES</u>	<u>DESCRIPTION</u>
AUG. 19, 1960 NOT COMPLETED	ARMINGTON AVENUE FROM NEAR CARLETON STREET TO ACADEMY AVENUE. COMPTON STREET FROM APPROX. 330 FEET EAST OF MT. PLEASANT AVENUE TO MOUNT PLEASANT AVENUE.
SEPT. 9, 1960 NOT COMPLETED	QUARRY STREET FROM ITS EASTERLY TERMINATION TO CHARLES STREET.
NOT COMPLETED	SMART STREET FROM NEAR WINDMILL STREET TO PRESENT SEWER IN SMART STREET.
NOT COMPLETED	CHRISTOPHER STREET FROM NEAR WINDMILL STREET TO PRESENT SEWER IN CHRISTOPHER STREET.
AUG. 17, 1960 NOT COMPLETED	DAKOTA STREET FROM ITS EASTERLY TERMINATION TO WOODWARD ROAD. HILLCREST AVENUE FROM NEAR FREEDOM ROAD TO ADA AVENUE, AND IN ADA AVENUE FROM HILLCREST AVENUE TO PRESENT SEWER IN ADA AVENUE.
AUG. 30, 1960	MONTICELLO STREET FROM OPPER STREET TO ITS TERMINATION AT ROBIN BROOK SEWER.

FOLLOWING ARE LISTS OF STREETS FOR WHICH SEWER PLANS WERE MADE FOR SUBMISSION TO THE PUBLIC WORKS COMMITTEE OF THE CITY COUNCIL:

LIST NO. 1

SEWERS ORDERED BUILT BY THE CITY COUNCIL WHICH ARE NOT CONSTRUCTED AS OF SEPTEMBER 30, 1960 EXCLUSIVE OF THOSE CONTRACTED FOR:

CITY COUNCIL  
RESOLUTION  
AND YEAR.

	<u>LOCATION</u>
229 1940	BUCKLIN STREET, FROM NEAR POTTERS AVENUE TO GREENWICH STREET.
440 1940	NIANTIC AVENUE, FROM NEAR CRANSTON STREET TO AKERMAN STREET.
293 1951	WHITE STREET, FROM POWELL STREET TO COLLYER STREET.

LIST NO. 2

SEWERS PETITIONED FOR AND REFERRED TO THE PUBLIC WORKS COMMITTEE FOR FURTHER ACTION, FROM OCTOBER 1, 1950 TO SEPTEMBER 30, 1960.

APR. 5, 1951	BRUSH HILL ROAD, FROM ADA AVENUE TO CHALKSTONE AVENUE.
APR. 19, 1951	MESSENGER STREET, FROM ATWELLS AVENUE TO SPRUCE STREET.
MAY 3, 1951	BENEDICT STREET, FROM CRANSTON STREET TO HUNTINGTON AVENUE.
OCT. 2, 1952	OKIE STREET, FROM ITS WESTERLY TERMINATION TO BATH STREET.
APR. 16, 1953	MYRA STREET, FROM NEAR BOUNDRY AVENUE TO KILLINGLY STREET.
JULY 1, 1954	BULLOCK AVENUE, FROM CITY LINE TO DUNBAR STREET.
SEPT. 2, 1954	GROTON STREET, FROM DURFEE STREET TO POWHATTAN STREET.
JULY 7, 1955	VESPUCCI STREET, FROM FERNANDO STREET TO DOUGLAS AVENUE.
SEPT. 1, 1955	QUEEN STREET, FROM ITS NORTHERLY TERMINATION TO CLEVELAND STREET.
NOV. 3, 1955	HYMER STREET, FROM NEAR SEAMANS STREET TO CRANDALL STREET.
DEC. 1, 1955	DERRY STREET, FROM NEAR GEOFFREYS COURT TO OREGON STREET.
MAY 3, 1956	STUKELEY STREET, FROM ITS NORTHERLY TERMINATION TO HARTFORD AVENUE.
MAY 3, 1956	WESTMORE STREET, FROM NIANTIC AVENUE TO LAKEVIEW DRIVE.
AUG. 2, 1956	LIBIA STREET, FROM THE CITY LINE TO FARMINGTON AVENUE.
NOV. 1, 1956	(AKERMAN STREET, FROM NIANTIC AVENUE, NORTHERLY). (DAY STREET, FROM NIANTIC AVENUE, NORTHERLY). (DUPONT STREET, FROM NIANTIC AVENUE, NORTHERLY). AVENUE, NORTHERLY) (BINNEY STREET, FROM NIANTIC AVENUE, NORTHERLY).
NOV. 1, 1956	SWAN STREET, FROM EDDY STREET TO POE STREET.
FEB. 7, 1957	MARIA STREET, FROM KILLINGLY STREET TO THE CITY LINE.
JUNE 6, 1957	COWPER COURT, FROM ITS TERMINATION TO MESSER STREET.
JUNE 5, 1958	YORK STREET, FROM ITS EASTERLY TERMINATION TO NORTH MAIN STREET.
SEPT. 4, 1958	YORKTOWN PLACE, FROM ITS TERMINATION TO LINTON STREET.
JULY 2, 1959	PACIFIC AVENUE, FROM BECKWITH STREET TO AQUIDNECK STREET.
JULY 2, 1959	HENNESSEY STREET, FROM BULLOCK AVENUE TO ST. THOMAS STREET.
JULY 2, 1959	ROWLEY STREET, FROM BATTERSON STREET TO HENNESSEY STREET.
AUG. 6, 1959	COMO STREET, FROM ITS NORTHERLY TERMINATION TO LEDGE STREET.
MAR. 3, 1960	WAYLAND AVENUE, FROM EAST GEORGE STREET TO SOUTHERLY TERMINATION.
MAR. 3, 1960	TOGANSETT ROAD, FROM NIANTIC AVENUE TO LAKEVIEW DRIVE.
MAR. 3, 1960	UNNAMED GANGWAY FROM PETER STREET TO LEDGE STREET.

SEWER ASSESSMENTS: SEWER ASSESSMENTS AS PROVIDED BY AUTHORITY OF CHAPTER 870 OF THE PUBLIC LAWS OF THE STATE OF RHODE ISLAND OF 1901 ARE CERTIFIED FOR PAYMENT BY THE DIRECTOR OF PUBLIC WORKS TO THE CITY COLLECTOR. SPECIAL WORKING PLANS ARE MADE AND AREAS AND AMOUNTS ARE COMPUTED BY THIS OFFICE AND FILED FOR PERMANENT RECORD.

SEWER SYSTEM STATISTICS: IN ORDER TO MAKE COMPLETE THE PROVIDENCE SEWER SYSTEM STATISTICS UP TO THE END OF THE FISCAL YEAR OF SEPTEMBER 30, 1960 THE FOLLOWING EXTRACTS FROM PREVIOUS REPORTS ARE HEREIN INCLUDED AND THE MILEAGE FIGURES CHANGED TO THE NEW TOTALS.

THE CITY IS DIVIDED INTO FOUR MAIN DRAINAGE AREAS BOUNDING ON THE PROVIDENCE, WOONASQUAMUCKET, MOSHASSUCK AND SEEKONK RIVERS.

COMBINED SEWERS, DISCHARGING BOTH CRUDE SEWAGE AND STORM WATER INTO THE RIVERS, WERE CONSTRUCTED IN THESE AREAS BETWEEN THE YEARS 1871 AND 1890 TO A TOTAL LENGTH OF 62.7 MILES.

IN 1890 A NEW METHOD OF HANDLING SEWAGE FLOW WAS DEvised AND WAS CALLED THE IMPROVED SEWER SYSTEM. FROM 1890 TO 1904, 28.1511 MILES OF THIS SYSTEM WAS CONSTRUCTED WITH SIZES VARYING FROM 6 IN. TO 110 IN. IN DIAMETER. THIS SYSTEM INCLUDED THE INTERSEPTING SEWERS, DESIGNED FOR THE COLLECTION OF SEWAGE FLOW FROM THE OLDER SEWERS WHICH HERETOFORE DISCHARGED INTO THE RIVERS, WHICH HELPED TOWARD THE ELIMINATION OF SEWAGE POLLUTION OF RIVER AND HARBOR WATERS. DUE TO LATER REVISIONS IN CONSTRUCTION THE LENGTH OF THE IMPROVED SEWER SYSTEM EQUALED AS OF SEPTEMBER 30, 1960 51.1009 MILES.

IN 1872 THE FIRST STORM SEWER CONSTRUCTION WAS STARTED AND AS OF SEPTEMBER 30, 1960 A TOTAL OF 86.1353 MILES OF SEWERS FOR STORM WATER ONLY, HAVE BEEN CONSTRUCTED AND DISCHARGED INTO THE NEAREST AVAILABLE POND OR STREAM.

THE TOTAL LENGTH OF THE SO-CALLED REGULAR COMBINED SEWERS AS OF SEPTEMBER 30, 1960 EQUALS 323.7018 MILES.

THE TOTAL LENGTH OF ALL TYPES AND SIZES OF SEWERS MAINTAINED BY THE SEWER DIVISION OF THE PUBLIC WORKS DEPARTMENT AS FO SEPTEMBER 30, 1960 EQUALS 460,9380 MILES.

INCLUDED IN THIS MILEAGE ARE APPROXIMATELY 20,030 MANHOLES, ALSO THERE ARE APPROXIMATELY 4680 INLETS AND 11,800 BASINS FOR COLLECTING SURFACE WATER AND TRAPPING DEBRIS BEFORE ENTRANCE INTO THE SEWERS.

THE NORMAL OR DRY WEATHER FLOW OF SEWAGE IS COLLECTED AND CONVEYED TO THE SEWAGE TREATMENT PLANT AT FIELDS POINT. TIDE GATES ARE INSTALLED AT RIVER OUTFALLS TO PREVENT TIDEWATER OR RIVER WATER FROM ENTERING THE SEWERS.

THE SEWAGE FROM THE WASHINGTON PARK AND FIELDS POINT DISTRICTS, DRAINS INTO A SMALL PUMPING STATION EQUIPPED WITH TWO AUTOMATIC ELECTRICALLY DRIVEN PUMPS, LOCATED ON CITY LAND AT FIELDS POINT JUST SOUTH OF NEW YORK AVENUE AND FROM THERE IS PUMPED THROUGH A CAST-IRON FORCE MAIN DIRECTLY TO THE SEWAGE DISPOSAL PLANT.

A PART OF THE SEWAGE FROM THE WEST ELMWOOD DISTRICTS DRAINS INTO A SMALL PUMPING STATION, EQUIPPED WITH TWO AUTOMATIC ELECTRICALLY DRIVEN PUMPS, LOCATED ON CITY LAND AT RESERVOIR AVENUE AND PONTIAC AVENUE AND FROM THERE, DRAINS INTO THE RUTHERGLEN AVENUE GRAVITY-FLOW SEWER.

A COMPARATIVELY HIGH LEVEL SEWER COLLECTS SEWAGE FROM THE ELMWOOD AND SOUTH PROVIDENCE DISTRICTS AND FLOWS THROUGH GRAVITY SEWERS, DIRECTLY TO THE SEWAGE DISPOSAL PLANT.

GENERALLY, WITH THE EXCEPTIONS AS OUTLINED IN PREVIOUS PARAGRAPHS, LOW LEVEL SEWERS COLLECT THE SEWAGE FROM THE REMAINDER OF THE CITY DISTRICTS, WITH MOST OF THE EAST SIDE SEWAGE FLOWING THROUGH AN INVERTED SYPHON SEWER UNDER THE PROVIDENCE RIVER AT INDIA STREET, AND THE SEWAGE FLOWS BY GRAVITY TO THE LARGE PUMPING STATION AT ERNEST STREET. AT THE PUMPING STATION THE SEWAGE IS LIFTED APPROXIMATELY 27 FEET TO THE HIGH LEVEL SEWER IN ERNEST STREET AND FLOWS BY GRAVITY TO THE SEWAGE DISPOSAL PLANT.

SEWAGE FOR YEAR FROM CRANSTON, JOHNSTON AND NORTH PROVIDENCE. BY SPECIAL ACTS OF THE RHODE ISLAND LEGISLATURE, PARTS OF CRANSTON SEWAGE, AND ALL THE NORTH PROVIDENCE AND JOHNSTON SEWAGE ARE ALLOWED TO ENTER THE CITY OF PROVIDENCE SEWER SYSTEM FOR DISPOSAL AND TREATMENT. SEWAGE COSTS ARE BILLED QUARTERLY AND THE FOLLOWING SHOWS THE AMOUNTS BILLED IN OUR FISCAL YEAR 1959-1960.

RECEIVED FROM CRANSTON. (NARRAGANSETT BREWING COMPANY) CONTRACT DATED JUNE 1, 1955 - TERMS \$57.00 PER MILLION GALLONS 111,020,000 GALLONS METERED AND BILLED FOR \$6328.14.

\$57.00

RECEIVED FROM JOHNSTON. CONTRACT DATED MARCH 9, 1956 - TERMS PER MILLION GALLONS, 232,817,900 GALLONS, METERED, ESTIMATED AND BILLED FOR \$13,270.63.

RECEIVED FROM NORTH PROVIDENCE. FLOW MEASURED AND COMPUTED TO EQUAL 2,811,838,090 GALLONS. NEW CONTRACT DATED SEPTEMBER 8, 1959 TERMS \$50,000. ANNUALLY.

PRIVATE DRAINS. IN CO-OPERATION WITH THE OFFICE OF THE SANITARY ENGINEER, A COMPLETE RECORD IS MADE OF ALL SEWAGE DRAINAGE INSTALLATIONS IN PRIVATE HOUSES. THESE RECORDS AND RECORD PLANS ARE MADE AND FILED BY THE SEWER SECTION OF THE PUBLIC WORKS ENGINEERING OFFICE AND CONTAIN VALUABLE INFORMATION OF INTEREST TO PROPERTY OWNERS, TITLE SEARCHERS, ETC. ALL NEW WORK IS COVERED BY FIELD INSPECTION AND MUST COMPLY WITH THE CITY ORDINANCES AS TO WORKMANSHIP AND MATERIALS AND THE WORK MUST BE DONE BY LICENSED PLUMBERS OR DRAIN LAYERS WHO MUST PROVE THEIR QUALIFICATIONS BEFORE BEING ISSUED PERMITS BY THE DIRECTOR OF PUBLIC WORKS.

IN THE JANUARY SESSION OF THE STATE LEGISLATURE - CHAPTER 1661 - 1945, THERE WAS ENACTED BY THE GENERAL ASSEMBLY AN ACT TO SIMPLIFY THE PRESENT SYSTEM OF LICENSING MASTER AND JOURNEYMEN PLUMBERS FOR THE PROTECTION OF PUBLIC HEALTH. SEC. 8 (READS AS FOLLOWS) "NOTHING IN THIS ACT SHALL PROHIBIT ANY CITY OR TOWN FROM GRANTING A LICENSE TO ANY PERSON AS A DRAIN LAYER TO ENGAGE IN THE BUSINESS OF THE LAYING OF DRAINS AND CESSPOOLS (WITH THE PROVISION, THAT IT IS NOT REQUIRED BY THE HOLDER OF A STATE LICENSE)".

FOR THE CALENDAR YEAR OF 1960 THE DIRECTOR OF PUBLIC WORKS ISSUED LICENSES TO EIGHT DRAIN LAYERS AND TWO SPECIAL FOR SPRINKLER SYSTEM LICENSES. NO LIST OF LICENSED PLUMBERS WAS RECEIVED FROM STATE AUTHORITIES. THERE WAS APPROXIMATELY 3000 TITLES INVESTIGATED FOR ENCUMBRANCES OF DRAINAGE FACILITIES BY TITLE COMPANY INVESTIGATORS, AND 3000 SKETCHES OF

PRESENT DRAINAGE INSTALLATIONS GIVEN TO INTERESTED PARTIES. (OWNERS, PLUMBERS AND DRAIN LAYERS).

MISCELLANEOUS WORK. DURING THE YEAR SPECIFICATIONS WERE WRITTEN UP, STENCILS CUT AND CHECKED AND THE BIDS WERE TABULATED FOR THE FOLLOWING EQUIPMENT:

<u>BIDS SUBMITTED</u>	<u>DESCRIPTIONS</u>	<u>ORDERED BY</u>
NOV. 10, 1959	ONE - 30000# DUMP TRUCK & WINCH	FORESTRY SECTION
NOV. 10, 1959	ONE - 30000# CHASSIS ONLY	HIGHWAY SECTION
APRIL 5, 1960	ONE - MOTORIZED STREET SWEEPER	HIGHWAY SECTION
APRIL 5, 1960	SIX - 30000# DUMP TRUCKS	HIGHWAY SECTION
JUNE 28, 1960	TWO - 2-DOOR SEDAN	HIGHWAY SECTION
JULY 5, 1960	ONE - 10-14 TON ROAD ROLLER	HIGHWAY SECTION
JULY 5, 1960	ONE - 3-5 TON ROAD ROLLER	HIGHWAY SECTION
JULY 12, 1960	ONE - MOTOR GRADER	HIGHWAY SECTION
JULY 12, 1960	ONE - FRONT END LOADER	HIGHWAY SECTION
JULY 19, 1960	ONE - 20000# PLATFORM TRUCK & CRANE	HIGHWAY SECTION
JULY 26, 1960	ONE - COMPACT CAR	BUILDINGS SECTION

IN REGARD TO THE CONTRACT WITH THE M. A. GAMMINO CONSTRUCTION CO. DATED JULY 8, 1959 FOR "CONSTRUCTION OF RAIL FACILITIES AT THE WEST RIVER INDUSTRIAL PARK" IN THE AMOUNT OF \$54,500.00, THIS OFFICE CHECKED OVER PLANS FOR THE TRACKS AND A BRIDGE AND COVERED THE INSPECTION OF THE WORK IN THE FIELD. WORK STARTED JULY 9, 1959 AND WAS COMPLETED DEC. 1, 1960. THE VALUE OF THE WORK EQUALED \$54,110.00.

IN CONNECTION WITH THE SEWAGE FLOW FROM THE TOWN OF JOHNSTON, HALEY AND WARD ENGINEERS, BOSTON, MASS. AND THE V. F. CAPALDI CONSTRUCTION CO. ARE WORKING ON THE PROPOSED FIVE CONNECTIONS TO THE PROVIDENCE SEWER SYSTEM. FINAL PLANS WERE APPROVED JULY 30, 1957 AND PERIODICAL INSPECTION TRIPS WERE MADE ON THIS WORK IN PROVIDENCE AND FINAL INSPECTIONS FOR APPROVAL WERE MADE BY THE SEWER MAINTENANCE SECTION. THE FOLLOWING DATA IS SUBMITTED:

<u>LOCATION</u>	<u>SIZE</u>	<u>COMPLETION DATE OF CONNECTION</u>
MANTON AVENUE	16 INCH WITH METER	JANUARY 22, 1957
SILVER LAKE AVENUE	15 INCH WITH METER	AUGUST 1, 1958
HARTFORD AVENUE	8 INCH NOT METERED	APRIL 15, 1957
PAOLINO STREET	8 INCH NOT METERED	AUGUST 1, 1959
SUNSET AVENUE	8 INCH NOT METERED	NOT CONNECTED

MANY CONFERENCES WERE HELD WITH ENGINEERS, MAKING SPECIAL STUDIES FOR FLOOD CONTROLS, IN CONNECTION WITH THE PROPOSED FOX POINT DAM.

THE FOLLOWING ENGINEERS ARE ENGAGED ON THIS PROJECT:

UNITED STATES ARMY ENGINEERS, BOSTON, MASS. INCLUDING THE REAL ESTATE DIVISION.  
ENGINEERS, FENTON G. KEYES, ASSOCIATES, PROVIDENCE, R.I.  
ENGINEERS, CHARLES A. MAQUIRE & ASSOCIATES, PROVIDENCE, R.I.  
GEOLOGIST AND ENGINEER, FRANK E. FAHLQUIST, PROVIDENCE, R.I.

MANY CONFERENCES WERE HELD IN CONNECTION WITH THE PROVIDENCE FREEWAY AND THE HUNTINGTON EXPRESSWAY, WITH THE PUBLIC WORKS DEPT. OF THE STATE OF RHODE ISLAND IN REGARD TO THE DISPOSAL OF STORM WATERS FROM THE VARIOUS HIGHWAYS AND ALL SEWER SIZES AND CONNECTIONS TO THE CITY SEWERS WERE APPROVED. THIS WORK IS NOW IN CONSTRUCTION.

THE PUBLIC WORKS HIGHWAY OFFICE BUILDING AND GARAGE IS NOW IN THE PROCESS OF CONSTRUCTION AT ERNEST ST. ALL EQUIPMENT PLANS AND CONSTRUCTION PLANS SUBMITTED TO DATE BY THE CONTRACTOR WERE APPROVED BY THIS OFFICE AND THE ARCHITECTURAL FIRM OF KENT, CRUISE AND ALDRICH. ALL WORK HAS BEEN INSPECTED AND MONTHLY ESTIMATES FOR PAYMENTS TO THE CONTRACTOR WERE MADE BY THIS OFFICE. THE CONTRACT FOR THE BUILDING AND OTHER INCIDENTAL WORK WAS AWARDED TO JOSEPH P. FLYNN UNDER DATE OF MAY 18, 1959 AND GROUND WAS BROKEN BY THE MAYOR JUNE 4, 1959. THE CONTRACT WAS IN THE AMOUNT OF \$702,422.00 AND AS OF SEPT. 30, 1960 THE ESTIMATED VALUE OF THE WORK COMPLETED EQUALED \$548,608.70.

PLANS WERE MADE AND SPECIFICATIONS PREPARED BY THE ARCHITECTURAL FIRM OF KENT, CRUISE AND ALDRICH FOR THE PUBLIC WORKS, HIGHWAY DEPT. "STORAGE BINS AND CONVEYING EQUIPMENT". A CONTRACT FOR THIS WORK WAS AWARDED TO "CONVEYORS INCORPORATED" ON SEPT. 30, 1960 IN THE AMOUNT OF \$68,691.00. THESE BINS WILL BE LOCATED JUST EAST OF THE PUBLIC WORKS OFFICE BUILDING AND GARAGE.

AT MUNICIPAL WHARF - A PLAN APPROVED FOR ROOF ALTERATIONS, OVER THE FRUIT ROOM OF THE A. & P. CO. BUILDING FOR A COOLING SYSTEM, WHICH WAS INSTALLED IN APRIL 1960, ALSO A PLAN FOR ALTERATIONS TO THE WESTERLY ROADS OF THE A. & P. COMPANY LEASE AND A CONTRACT WAS GIVEN BY THE A. & P. CO. TO CAMPANELLA AND CARDI CO. TO CONSTRUCT THE NEW SEWERS AND ROADWAYS. THE SEWER WORK WAS STARTED ON SEPT. 15, 1959 AND COMPLETED ON SEPT. 30, 1960 AND WAS INSPECTED AND MEASURED UP BY THIS OFFICE. THE ROADWAY WORK WILL BE OF PENETRATION MACADAM CONSTRUCTION.

AT THE MUNICIPAL WHARF A PERMIT WAS GRANTED BY THE U. S. ARMY ENGINEER DIVISION AND ALSO BY THE STATE OF RHODE ISLAND TO CONSTRUCT AND MAINTAIN A SAND AND GRAVEL DIKE IN PROVIDENCE (HARBOR) RIVER BASED ON OUR PLAN DATED FEBRUARY 26, 1959 AND REVISED MAY 8, 1959 - PERMIT IS DATED JULY 6, 1959 AND IF WORK IS NOT COMPLETED BEFORE DECEMBER 31, 1962 THE PERMIT BECOMES

NULL AND VOID. THIS CONSTRUCTION WILL BE OF A CONTINUING NATURE.

AT THE MUNICIPAL WHARF SOUNDINGS WERE TAKEN AND WERE COMPLETED ON APRIL 13, 1960 FOR THE FULL LENGTH OF THE WHARF AND FOR 100 FEET EAST OF THE WALL. A PLAN WAS MADE AND ESTIMATES OF THE DREDGING REQUIRED WAS COMPUTED.

AT MUNICIPAL WHARF - A CONTRACT WAS ENTERED INTO WITH FENTON G. KEYES ASSOCIATES ON JUNE 10, 1959 FOR THE PLANS AND SPECIFICATIONS FOR THE SOUTHERLY EXTENSION OF THE SEA WALL. AS OF JULY 14, 1960, EST. No. 3, THE COST EQUALLED \$65,513.87. ALSO A CONTRACT WAS ENTERED INTO WITH THE RAYMOND CONCRETE PILE CO. DATED SEPT. 29, 1959 FOR SUB-SURFACE EXPLORATIONS, AND BASED ON UNIT PRICES FOR SEVEN BORINGS AND COMPLETED ON OCT. 8, 1959, THE COST EQUALLED \$2,319.45.

AT MUNICIPAL WHARF - A CONTRACT WAS ENTERED INTO WITH THE M.A. GAMMINO CONSTRUCTION CO. FOR "THE BULKHEAD EXTENSION OF MUNICIPAL WHARF". THE CONTRACT WAS DATED JULY 18, 1960 AND IN THE AMOUNT OF \$1,565,445.00 BASED ON UNIT PRICES. THE DREDGING WORK IN CONNECTION WITH THIS CONTRACT WAS STARTED SEPT. 28, 1960.

A STORM SEWER 66" DIAM. AT THE C. H. SPRAGUE & SON CO. YARD AT HENDERSON ST. AND ALLENS AVENUE WAS EXTENDED APPROXIMATELY 25 FEET BY THE SEABOARD CONSTRUCTION CO. WITH THE CITY PAYING 50% OF THE COST BASED ON A PREVIOUS AGREEMENT IN REGARD TO THE EXTENSION OF THIS SEWER. THE WORK WAS STARTED AUGUST 1, 1960 AND COMPLETED AUGUST 24, 1960. THE COST OF THE CITY'S SHARE EQUALLED \$2007.17.

ON JANUARY 18, 1960, TESTIMONY WAS GIVEN IN SUPERIOR COURT, JUDGE PATRICK J. CURRAN PRESIDING IN REGARD TO THE LOCATION OF A NEWS-STAND NEAR THE CORNER OF DORRANCE AND WESTMINSTER STREETS AT THE REQUEST OF THE CITY LAW DEPT., REGARDING THE RESTRICTION OF THE LOCATION OF NEWS-STANDS.

ALL PLANS MADE IN CONNECTION WITH THE SEWER BASINS AND INLETS REQUIRED FOR DRAINAGE OF NEW OR REBUILT STREETS WERE MADE IN THIS OFFICE.

THIS DIVISION HAS MADE STUDIES, PREPARED PRELIMINARY PLANS, CONFERRED WITH OTHER CITY DEPARTMENTS, AND CONSULTED WITH THE STATE DEPARTMENT OF PUBLIC WORKS, THE FEDERAL PUBLIC ROADS ADMINISTRATION, AND THE CONTRACT ENGINEERS AND ARCHITECTS, PREPARING PLANS AND SPECIFICATIONS FOR ALL PUBLIC WORKS PROJECTS IN THE CITY.

PLANS SUBMITTED BY ARCHITECTS, PRIVATE ENGINEERS, THE VARIOUS UTILITIES AND CONTRACTORS WERE CHECKED OVER, REVISED AND APPROVED FOR SIDEWALK SLABS, VAULTS, BRIDGE CROSSINGS AND DUCT INSTALLATIONS UNDER OR OVER STREETS AND SIDEWALKS.

COST ACCOUNTS, BUDGETS, INVENTORIES, SICK LEAVES, VACATIONS, EMPLOYEE DATA ENTRANCES AND TERMINATIONS WERE REPORTED TO THE FINANCE DEPARTMENT. PAYROLLS AND REQUISITIONS WERE MADE UP AND DELIVERY SLIPS FORWARDED.

RECOMMENDATIONS: AGAIN IT IS RESPECTFULLY SUGGESTED THAT THIS DEPARTMENT HAS ENOUGH CLERICAL AND STENOGRAPHIC WORK TO WARRANT THE ASSIGNMENT OF A FULL TIME STENOGRAPHER TO THIS OFFICE.

RESPECTFULLY SUBMITTED,

GILBERT SMALL  
CHIEF OF THE ENGINEERING OFFICE.

CONSTRUCTION AND MAINTENANCE DIVISION

MR. CHARLES F. MCELROY,  
DIRECTOR OF PUBLIC WORKS,  
CITY HALL, PROVIDENCE, R.I.

DEAR SIR:

FOLLOWING IS THE ANNUAL REPORT COVERING ACTIVITIES OF THE CONSTRUCTION AND MAINTENANCE DIVISION FOR THE YEAR ENDING SEPTEMBER 30, 1960. THIS DIVISION CONSISTS OF THE CONSTRUCTION AND MAINTENANCE ADMINISTRATION AND THE FOLLOWING SECTIONS: HIGHWAY, BRIDGE MAINTENANCE, DRAW BRIDGE OPERATION, SIDEWALK AND CURBING, FORESTRY, SNOW REMOVAL, SEWER CONSTRUCTION AND MAINTENANCE, PUBLIC BUILDINGS, STREET LIGHTING, CONSTRUCTION AND MAINTENANCE SHOPS AND STORES, AND SEWER CONSTRUCTION AND MAINTENANCE SHOPS AND STORES.

THE EXPENDITURES OF THE ADMINISTRATION SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$ 8,232.04
ITEM 1 SERVICES OTHER THAN PERSONAL	932.80
ITEM 2 MATERIALS AND SUPPLIES	- -
	<u>\$ 9,164.84</u>

HIGHWAY SECTION

THE MAIN DUTY OF THIS SECTION IS THE MAINTENANCE OF APPROXIMATELY 340 MILES OF PAVED STREETS, INCLUDING THE REPAIRING, PATCHING, SEALCOATING, SURFACING, RESURFACING OR RECONSTRUCTION OF HIGHWAYS AND THE SETTING, RESETTING OR REPLACING OF GRANITE CURBING.

THIS SECTION ALSO CONSTRUCTS NEW HIGHWAYS WHEN ORDERED AND PERFORMS MISCELLANEOUS JOBS FOR OTHER SECTIONS OF THE DEPARTMENT OF PUBLIC WORKS AS WELL AS FOR OTHER CITY DEPARTMENTS.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$734,024.29
ITEM 1 SERVICES OTHER THAN PERSONAL	163,448.12
ITEM 2 MATERIALS AND SUPPLIES	110,941.43
ITEM 5 CAPITAL OUTLAY	<u>410.90</u>
	1,008,824.74

REVENUE: \$23,835.98

STREETS REPAIRED AND SURFACED OR RESURFACED

<u>STREET</u>	<u>FROM</u>	<u>TO</u>
KINGSLEY AVENUE	GASPEE	HARRIS
VEAZIE STREET	O'NEIL	BRANCH
PEMBROKE AVENUE	EATON	SMITH
SUNBURY STREET	GLOUCESTER	RIVER
HUMBOLT AVENUE	ARLINGTON	WAYLAND
EDDY & ALLENS AVE. (INTERSECTION)		
CRAWFORD STREET (BRIDGE)		
HOLLYWOOD ROAD	PARADE	DEXTER
MAUDE STREET	SMITH	CONVENT
JASTRAM STREET	WHITFORD	SMITH
JONATHAN STREET	BALCH	TO END
TRANSIT STREET	SOUTH MAIN	EAST
PROSPECT STREET	ANGELL	TO END
PLANET STREET	SOUTH MAIN	BENEFIT
POWER STREET	SOUTH MAIN	IVES
EAST ORCHARD AVENUE	BUTLER	PARKSIDE ROAD
ORCHARD AVENUE	WAYLAND	BUTLER
LORRAINE AVENUE	LLOYD	LAUREL
LARCH STREET	MORRIS	CAMP
PLEASANT VALLEY PARKWAY	JUSTICE	CANTON
IRVING AVENUE	ARLINGTON	ELMGROVE
WOODBINE STREET	CAMP	IVY
PARKSIDE ROAD	ANGELL	TO DEAD END
TENTH STREET	HOPE	HIGHLAND
EAST RIVER STREET	WATERMAN	PITMAN
ELEVENTH STREET	HOPE	TOP
NIAGARA STREET	EARLY	SACKETT
YOUNG ORCHARD AVENUE	HOPE	GOVERNOR
CHASE AVENUE	HOPE	TOP
TWELFTH STREET	HOPE	TOP
RIVER AVENUE	BRADLEY	ADMIRAL

HART STREET	HOPE	IVY
JOB STREET	LEDGE	SMART
WINDMILL STREET	LEDGE	TO SCHOOL HOUSE
SALINA STREET	HAWKINS	(EAST)
BISMARCK STREET	JOB	SILVER SPRING
CHAD BROWN STREET	MARCH	DOUGLAS
CHAD BROWN	OAKLAND	PINEHURST
FAIROAKS AVENUE	ELMHURST	ROSLYN
FOURTH STREET	NORTH MAIN	HOPE
HUNNEWELL AVENUE	ADA	MANTON
PUTNAM STREET	ATWELLS	APPLETON
MONGENAIS STREET	ATWELLS	TO DEAD END
RUSHMORE AVENUE	ADA	MANTON
POMONA AVENUE	PEMBERTON	MT. PLEASANT
POMONA AVENUE	ERASTUS	ACADEMY
STEBEN STREET	MANTON	ATWELLS
BRUSH HILL ROAD	ADA	MANTON
SEARS AVENUE	ATWELLS	RANGELEY
RING STREET	KNIGHT	TOBEY
ADA AVENUE	HUNNEWELL	BRUSH HILL

STREETS STARTED 1958-59: COMPLETED 1959-60

RADCLIFFE AVENUE	FROM	EATON	TO	SMITH
CARLETON STREET		ATWELLS		CHAUCER
SISSON STREET		MANTON		CLOUD
O'NEIL STREET		DOUGLAS		VEAZIE
LYNCH STREET		VALE		CHALKSTONE
HOMEFIELD STREET		MT. PLEASANT		BASSWOOD
JUSTICE STREET		ACADEMY		PLEASANT VALLEY PKWY

STREETS STARTED 1959-60: INCOMPLETE SEPT. 30, 1960

HUXLEY AVENUE	FROM	EATON	TO	SMITH
ALMY STREET		WESTMINSTER		GESLER
ACORN STREET		ATWELLS		CEDAR

PATCHING AND REPAIRING SUNDRY STREETS

PATCHING MATERIALS USED FOR TEMPORARY REPAIRS WERE PURCHASED FROM PRIVATE VENDORS.

APPROXIMATELY 340 MILES OF HIGHWAY WERE MAINTAINED DURING THE FISCAL YEAR.

MATERIALS USED ON GENERAL PATCHING AND REPAIRING WERE AS FOLLOWS:

READY MIX CONCRETE	70	CU. YDS.	CRUSHED STONE	251.12	TONS
A.C. MIX	1365.10	TONS	KEROSENE	760	GALS.
ASPHALT	85	TONS	SAND	580	TONS
GRAVEL 1-1/2"	51	TONS			

MATERIALS USED ON SURFACING AND RESURFACING WERE AS FOLLOWS:

A.C. MIX	23,742.45	TONS
CEMENT	94	BAGS
CRUSHED STONE 2"	252.13	TONS
KEROSENE	7,240	GALS.
SAND	736	TONS

MATERIALS USED IN REPAIRING SIDEWALKS DUE TO DAMAGE CAUSED BY REMOVING TREES WITH DUTCH ELM DISEASE WERE AS FOLLOWS:

CEMENT	906	BAGS
GRAVEL 1 1/2"	350.30	TONS
SAND	466.15	TONS
A.C. MIX	293.75	TONS

DRIVEWAYS AND CURBING

DRIVEWAYS ALTERED	4	2' CIRCULAR CORNERS SET	414
DRIVEWAYS CONSTRUCTED	255	S.B. CORNERS SET	96
DRIVEWAYS WIDENED	44	CURB SET AND RESET	3,488 FT.
DRIVEWAYS CLOSED	20	DRIVEWAYS RELOCATED	4

MISCELLANEOUS WORK

FOLLOWING IS A LIST OF DIVISIONS AND OTHER DEPARTMENTS OR AGENCIES FOR WHICH THE HIGHWAY SECTION HAS PERFORMED SERVICES DURING THE PAST YEAR, AND A LIST OF JOBS PERFORMED:

ENGINEERING DIVISION, BRIDGE MAINTENANCE, DRAW BRIDGES, HARBOR MASTER, SIDEWALK AND CURBING, FORESTRY, PUBLIC BUILDINGS, SEWER MAINTENANCE, SEWAGE DISPOSAL, GARBAGE INCINERATOR, MUNICIPAL WHARF, CITY SERGEANT, AND THE PARK, RECREATION, HEALTH, WELFARE, POLICE AND FIRE DEPARTMENT, CHAPIN HOSPITAL, RHODE ISLAND HOSPITAL, MUNICIPAL GARAGE, AND TRAFFIC ENGINEERING.

1. GRADING BASEBALL FIELDS AT THE FOLLOWING GROUNDS: CYPRESS ST. PLAYGROUND, FOX POINT PLAYGROUND, RICHARDSON ST. PLAYGROUND, VALLEY ST. PLAYGROUND, LAUREL HILL PLAYGROUND, DEXTER TRAINING GROUNDS, NEUTACONKANUT PARK, HOPKINS PARK, JOSEPH WILLIAMS FIELD, MT. PLEASANT PARK, BUCKLIN ST. PLAYGROUND, VEAZIE ST. PLAYGROUND, ROGER WILLIAMS PARK, ASCHAM PARK, MT. PLEASANT HIGH SCHOOL FIELD, PROVIDENCE GAS COMPANY FIELD, DAVIS PARK, QUAID ST. PLAYGROUND, GARIBALDI PLAYGROUND, RIDGE ST. PLAYGROUND, MUNICIPAL GOLF COURSE, AND HAWKINS ST. FIELD.
2. REPAIRING ROADS AT MUNICIPAL DOCK AND HAULING PILL FOR GANO STREET, FIELDS POINT, AND MANTON AVENUE DUMPS.
3. GRADED DUMPS AT FIELDS POINT, GANO STREET, MOUNT PLEASANT AVENUE, SMITH STREET, MANTON AVENUE, AND HARTFORD AVENUE.
4. RESURFACED ROADWAYS IN ROGER WILLIAMS PARK.
5. ERECTED AND REMOVED BANDSTANDS FOR COLUMBUS DAY, ARMISTICE DAY, MEMORIAL DAY AND LABOR DAY CELEBRATIONS; ALSO FOR VARIOUS VETERANS AND CIVIC ORGANIZATIONS FOR DEDICATIONS AND MEMORIALS.
6. DECORATED CITY OF PROVIDENCE FOR CHRISTMAS AND FOURTH OF JULY CELEBRATIONS.
7. SET UP AND REMOVED EQUIPMENT AT THE VARIOUS VOTING PLACES IN THE CITY FOR THE BOARD OF CANVASSERS.
8. REMOVED RUBBISH FROM THE CITY HALL.
9. WORKED ON THE REMOVAL OF LARGE SAND HILL ON LAND LEASED BY SUN OIL CO. AT FIELDS POINT.
10. MOVED AND PUT IN STORAGE THE PERSONAL BELONGINGS AND FURNITURE OF MANY FAMILIES EVICTED BY THE COURTS AND BEING HELPED BY THE WELFARE DEPARTMENT.
11. PAVED SOMERSET STREET PLAYGROUND.
12. PERFORMED PERMANENT MAINTENANCE ON FOLLOWING STREETS: ALLENS AVE., ELMWOOD AVE., EDDY STREET, SMITH STREET, GILMORE STREET AND CEMETERY STREET.

LAWNS AND GRASS PLATS

COHAN BOULEVARD  
OAKLAND AVENUE  
KINSLEY AVENUE  
NORTH MAIN STREET  
FRANKLIN SQUARE  
ELMGROVE AVENUE  
CHAD BROWN ST.  
ATWELLS AVENUE

EIGHTH ST. AND LORIMER AVE.  
SLATER AVE. AND GOLDSMITH ST.  
SEWER DISPOSAL GROUNDS  
EDDY ST. AND SHIP' ST.  
MARKET SQ.  
CEMETERY ST.  
PITMAN ST.  
GOVERNOR ROBERTS EXPRESSWAY

BRIDGE MAINTENANCE SECTION

THIS SECTION IS RESPONSIBLE FOR THE REPAIR AND MAINTENANCE OF ALL CITY-OWNED BRIDGES.

THE EXPENDITURES OF THE SECTION WAS AS FOLLOWS:

ITEM 0	PERSONAL SERVICE	\$38,273.75
ITEM 1	SERVICES OTHER THAN PERSONAL	3,046.48
ITEM 2	MATERIALS AND SUPPLIES	8,114.56
		<u>\$49,434.79</u>

REVENUE: \$13.04

THERE ARE 57 CITY-OWNED BRIDGES, OF WHICH THE FOLLOWING 20 REQUIRED WORK THIS YEAR:

ACORN STREET BRIDGE	MERINO BRIDGE (GLENORRIDGE AVE.)
HARRIS AVE. OVERPASS	MERINO PARK FOOTBRIDGE
FRANCIS STREET BRIDGE	NASH LANE BRIDGE (PETTIS ST.)
GASPEE STREET BRIDGE	PARK STREET BRIDGE
PLAINFIELD STREET OVERPASS	RED BRIDGE
MAGNOLIA STREET OVERPASS	POINT STREET VIADUCT

POINT STREET BRIDGE	CEMETERY BRIDGE
ROGER WILLIAMS AVE. BRIDGE	SMITH STREET BRIDGE
DELAINÉ STREET BRIDGE	MANTON BRIDGE
CHARLES STREET BRIDGE	CRAWFORD STREET BRIDGE

THE FOLLOWING WORK WAS ALSO DONE:

1. REPAIRED SIDEWALKS ON THE FOLLOWING BRIDGES: RED, POINT, GLENBRIDGE AVE., ROGER WILLIAMS AVE., PARK ST., LIVINGSTONE ST., ACORN ST., DELAINE ST., AND STEVENS ST.
2. REPAIRED ROADWAYS ON ACORN ST., LIVINGSTONE ST., PARK ST., SMITH ST., AND CHARLES ST. BRIDGES, AND CEMETERY ST. BRIDGEWAY.
3. REPAIRED LELAND STREET, MERINO PARK, AND ADELAIDE AVE. FOOTBRIDGES.
4. CAULKED AND PAINTED BOATS FOR RED BRIDGE AND BRIDGE MAINTENANCE SECTION.
5. MOVED BRIDGE MAINTENANCE SHOP AND EQUIPMENT TO HARBOR MASTERS BUILDING AT POINT STREET.
6. REPAIRED AND REMODELED OLD BOILER HOUSE AT SEWAGE PUMPING STATION FOR USE AS ROAD SWEEPER SHED AND REPAIR SHOP.
7. REPAIRED BREAKS IN FENCES ON BOTH KINSLEY AVE. AND PROMENADE STREET DAMAGED BY AUTOMOBILES.
8. REPAIRED FOUR SPRINKLER SYSTEMS IN STORAGE SHED AT MUNICIPAL DOCK.
9. REPAIRED STOVE AND DOORS TO OPERATING HOUSE AT RED BRIDGE.
10. HELPED MOVE HIGHWAY STOCK ROOM AND ALL HIGHWAY SHOPS.
11. ERECTED NEW CHAIN LINK FENCE ALONG RAILROAD ON WEST EXCHANGE STREET BETWEEN ATWELLS AVENUE AND ACORN STREET.
12. REPAIRED PLANK ROADWAYS IN BOTH PARK ST. AND ACORN ST. BRIDGES DAMAGED BY FIREMEN IN CHOPPING OUT BURNING WOOD.
13. REPAIRED TWO STEEL EXPANSION JOINTS ON ROBERTS EXPRESSWAY; ALSO, THE EXPANSION JOINT ON THE BRIDGE OVER THE EXPRESSWAY ON WESTMINSTER STREET.
14. REPAIRED 3 HYDRANTS AND 2 BREAKS IN WATER MAIN AT FIELDS POINT.
15. REPAIRED BREAK IN FENCE AT RED BRIDGE DAMAGED BY AUTOMOBILE.
16. REPAIRED EXPANSION JOINT ON POINT STREET VIADUCT.
17. REPAIRED BROKEN RAILROAD TRACK AT FIELDS POINT.
18. REPAIRED 3 BREAKS IN GUARD RAIL ON ROBERTS EXPRESSWAY BROKEN IN TRAFFIC ACCIDENTS.

SIDEWALK AND CURBING SECTION

THIS SECTION IS RESPONSIBLE FOR THE CONDITION OF ALL SIDEWALKS IN THE CITY. IT SERVES NOTICES ON PROPERTY OWNERS FOR THE REPAIR, CONSTRUCTION OR RECONSTRUCTION OF SIDEWALKS; ISSUES LICENSES AND PERMITS TO SIDEWALK CONTRACTORS FOR THE REPAIR, CONSTRUCTION OR RECONSTRUCTION OF SIDEWALKS; INSPECTS ALL SIDEWALK WORK, MAKES TEMPORARY MINOR REPAIRS TO SIDEWALKS; AND IS RESPONSIBLE FOR THE POSTING AND MAINTENANCE OF STREET AND MEMORIAL SQUARE SIGNS.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICE	\$17,978.10
ITEM 1 SERVICES OTHER THAN PERSONAL	2,719.15
ITEM 2 MATERIALS AND SUPPLIES	853.23
ITEM 5 CAPITAL OUTLAY	107.17
TOTAL	<u>\$21,657.65</u>

REVENUE: SIDEWALK CONTRACTORS LICENSES - \$540.00

THE OPERATIONS OF THE SECTION WERE AS FOLLOWS:

SIDEWALK CONTRACTOR'S LICENSES ISSUED	54
NOTICES SERVED TO BUILD OR REPAIR	243
BUILT OR REPAIRED	162
PERMITS TO BUILD OR REPAIR	497
SEWER OPENINGS INSPECTED	127
DRIVEWAYS INSPECTED	291
MEMORIAL SQ. SIGNS REPAIRED & RELETTERED	20
MEMORIAL SQUARES APPROVED BY COUNCIL	1

SIDEWALKS INSPECTED AFTER INSTALLATION OF NEW ATER SERVICES	185
STREETS ABANDONED BY COUNCIL AND SIGNS ERECTED	16
WASHOUT DEPRESSIONS INSPECTED AND REPAIRED	132
SIDEWALK CLAIMS INVESTIGATED	27
STREET SIGNS REPAINTED AND RELETTERED	235
POLE OPENINGS INSPECTED	89
TOTAL LIN. FT. OF TAR CONCRETE SIDEWALKS BUILT	23,450
TOTAL LIN. FT. OF CEMENT SIDEWALKS BUILT	13,045

THIS SECTION REPLACED 943 DEFECTIVE STREET SIGNS WITH NEW BLACK AND WHITE METAL SIGNS.

#### FORESTRY SECTION

THIS SECTION IS RESPONSIBLE FOR THE PLANTING, CARE, MAINTENANCE AND REMOVAL OF TREES AND SHRUBBERY WITHIN THE LIMITS OF THE HIGHWAYS.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$76,613.40
ITEM 1 SERVICES OTHER THAN PERSONAL	18,634.52
ITEM 2 MATERIALS AND SUPPLIES	<u>4,652.68</u>
TOTAL	\$99,900.60

REVENUE: \$284.74

IN CONJUNCTION WITH THE MASTER PLAN FOR SHADE TREES ADOPTED BY THE SPECIAL SHADE TREE DEVELOPMENT COMMITTEE OF THE CITY COUNCIL IN 1952, THIS SECTION MADE A SURVEY OF SHADE TREES ON THE PUBLIC STREETS OF THE CITY. THIS SURVEY COMPLETED IN OCTOBER 1952 SHOWED THE FOLLOWING:

TOTAL NUMBER OF SHADE TREES ON CITY STREETS	27,234
MAPLE TREES ( ALL TYPES)	20,651
ELM TREES	4,746
OAK TREES (ALL TYPES)	539
MISCELLANEOUS (ALL OTHER TREES)	1,298

MOST OF THESE TREES ARE LARGE, WELL GROWN, AND REPRESENT TREES FROM 25 TO 50 FEET TALL.

TREES 25 TO 50 FEET TALL	85.1%	23,176
TREES OVER 50 FEET TALL	4.2%	1,144
TREES UNDER 25 FEET TALL	10.7%	2,914

LESS THAN ONE PERCENT OF THE TREES ON OUR STREETS ARE DISEASED OR IN POOR CONDITION. THE DISEASED TREES ARE BEING REMOVED AND REPLACED BY TREES FROM THE NURSERY. THIS PROGRAM OF DEMOLITION AND REPLACEMENT, THE SO-CALLED "DUTCH ELM PROGRAM", IS CLOSELY COORDINATED WITH THE OVERALL PROGRAM FOR THE CONTROL OF THIS DISEASE BEING PURSUED BY THE STATE OF RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION.

354 DISEASED ELM TREES WERE CONDEMNED AND REMOVED THIS YEAR. 230 OF THESE TREES WERE ON CITY STREETS AND 124 ON PRIVATE PROPERTY. THE FORESTRY SECTION REMOVED 102 TREES AND THE REMAINDER WAS TAKEN DOWN UNDER PRIVATE CONTRACT.

THE FOLLOWING IS A RECAPITULATION OF THE DUTCH ELM TREES REMOVED:

FORESTRY SECTION	102
SAMUEL KINDER BROS.	128
F. J. FEIGHERY CO.	<u>124</u>
TOTAL	354

THE NURSERY AT ROGER WILLIAMS PARK CONSISTS OF PIN OAKS AND UPRIGHT MAPLES. THE CULTIVATION AND GROWTH OF THESE TREES ARE PROGRESSING WELL AND MORE LAND HAS BEEN CLEARED AND CULTIVATED FOR FUTURE PLANTING. THESE TREES ARE BEING USED TO REPLACE THE DISEASED TREES WHICH WERE REMOVED AND, ALSO, TO INCREASE THE SHADE TREES ON OUR CITY STREETS. AT PRESENT THERE ARE 717 TREES IN THE NURSERY.

FOLLOWING IS A RESUME OF THE ACTIVITIES PERFORMED ON THE TREES OF THE CITY:

NUMBER OF TREES PRUNED (REGULAR)	2,878
NUMBER OF TREES REMOVED (REGULAR)	559
NUMBER OF TREES SPRAYED	6,115
NUMBER OF TREES PLANTED	693

#### SNOW REMOVAL

SNOW REMOVAL IS PRIMARILY A FUNCTION OF THE HIGHWAY SECTION. ALL THE ICE CONTROL (SANDING, SALTING, ETC.) IS ACCOMPLISHED BY THIS SECTION. THE PLOWING IS PERFORMED IN THE FOLLOWING MANNER:

WARDS 1, 2, AND 3 BY THE INCINERATOR TRUCKS  
WARDS 7 AND 8 BY RUBBISH TRUCKS  
WARDS 9 AND 10 BY SEWER MAINTENANCE TRUCKS  
WARDS 4, 5, 6, 11, 12, AND 13 BY HIGHWAY TRUCKS C&M-5

THIS SECTION USED THE FOLLOWING MATERIALS DURING THE YEAR:

11,683.68 TONS OF SAND

2,000 TONS OF SALT

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$132,425.80
ITEM 1 SERVICES OTHER THAN PERSONAL	69,505.52
ITEM 2 MATERIALS AND SUPPLIES	<u>46,213.27</u>
TOTAL	\$248,144.59

SEWER CONSTRUCTION AND MAINTENANCE SECTION

THE SECTION IS RESPONSIBLE FOR INSPECTING, MAINTAINING, CLEANING, REPAIRING, CONSTRUCTING AND RECONSTRUCTING SEWERS AND SEWER APPURTENANCES SUCH AS MANHOLES, CATCH BASINS, INLETS, ETC., OF THE SEWER SYSTEM.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$322,701.79
ITEM 1 SERVICES OTHER THAN PERSONAL	62,099.46
ITEM 2 MATERIALS AND SUPPLIES	22,458.69
ITEM 5 CAPITAL ACCOUNT	<u>1,226.35</u>
TOTAL	\$408,486.29

REVENUE: \$69,012.71

MAINTENANCE AND CONSTRUCTION WORK PERFORMED:

MANHOLES REBUILT AND REPAIRED	18
BROKEN AND DEFECTED MANHOLE COVERS REPLACED	28
DEFECTIVE MANHOLE FRAMES REPLACED	17
MANHOLE BULKHEAD BUILT	1
SUMP COVERS CEMENTED	2
CHUTES REPAIRED AND REBUILT	32
BROKEN CHUTE COVER REPLACED	1
CATCH BASINS REPAIRED AND REBUILT	32
CATCH BASIN COVERS REPLACED	22
BROKEN BASIN TRAPS REPLACED	4
BROKEN INLET STONES REPLACED	24
INLET STONES REPAIRED	1
BROKEN INLET COVERS REPLACED	2
GUTTER GRATES REPAIRED	2
BROKEN GUTTER GRATES REPLACED	5
SEWER LINES AND CONNECTIONS REPAIRED	14
BASIN CONNECTIONS REPAIRED	1
HOUSE CONNECTIONS REPAIRED	2

OTHER CONSTRUCTION AND MAINTENANCE WORK PERFORMED BY THIS SECTION:

1. CLEANED OUT TANKS FOR SEWER DISPOSAL PLANT, REMOVING 12 YDS OF SLUDGE AND SEMI-SOLIDS.
2. SPRAGUE COAL CO. YARD - IN CONJUNCTION WITH 24' EXTENSION OF OVERFLOW LINE, INSTALLED BY THE SPRAGUE COMPANY, INVERT AND ARCH OF OVERFLOW LINE WAS REPAIRED, AND CEMENT CAP WAS ERECTED OVER BRICK WORK TO EXTEND OVER PIPE. ALSO, FILLED IN 6 FT. CAVITY WITH CONCRETE.
3. ERNEST STREET NEW HIGHWAY SECTION GARAGE - IN CONJUNCTION WITH THIS NEW PROGRAM, EXCAVATED APPROXIMATELY 500' ON EAST AND WEST SIDE OF BUILDING, AND LAID 475 FT. OF 12" STORM LINE WITH 7 ROOF DRAIN CONNECTIONS TOTALING 50 FT. OF 6 INCH LINE. ALSO, BUILT 6 MANHOLES ON LINES AND EXTENDED CONNECTIONS 30' FROM BUILDING LINE TO A DEPTH OF 19', CONNECTING INTO THE 110" TRUNK LINE IN ERNEST STREET. THIS WORK STARTED JULY 7TH, 1960 AND NOT YET COMPLETED BY THE END OF FISCAL YEAR 1959-1960.
4. CURTIS STREET - IN CONNECTION WITH NEW ROAD PROGRAM, RAISED AND REBUILT TO NEW GRADE FOUR MANHOLES, 6 CATH BASINS AND 5 CHUTES, AND, ALSO, RELAID 12 FT. OF SEWER LINE.
5. BRUSH HILL ROAD AND ADA AVENUE - BECAUSE OF COLLAPSE IN SEWER LINE THE FOLLOWING WORK BECAME NECESSARY AND WAS PERFORMED: EXCAVATED 66 FT. OF LINE FROM ADA ONTO BRUSH HILL ROAD AND REPLACED 66 FT. OF LINE WITH 12" D/S SEWER PIPE WITH 1½ FT. GRAVEL BED. ALSO REBUILT BOTTOM OF INVERT IN MANHOLE AT BRUSH HILL ROAD INTERSECTION.
6. SEEKONK RIVER SECTION #34 - LOCATED TWO MANHOLES IN PROJECT AREA, AND REBUILT THEM TO NEW GRADE TO ALLOW FOR FURTHER WORK TO BE PERFORMED BY PRIVATE CONTRACTOR.
7. SEWER DISPOSAL PLANT - BUILT RETAINING WALL IN EFFLUENT CHANNEL TO FINAL TANK TO ELIMINATE DEAD SPOT IN FLOW OF SEWAGE. ALSO, INSTALLED CONTROL VALVES INTO AERATION TANK TO FACILITATE CLEANING OF SLUDGE DEPOSITS FROM EFFLUENT CHANNEL.

8. COIN STREET - SOUTH WATER TO SOUTH MAIN- DUE TO COLLAPSE IN OLD STONE LINE, SEWER LINE WAS REPAIRED, MANHOLE WAS BUILT TO FACILITATE CLEANING AND INSPECTION, AND CHUTE WAS REPAIRED.
9. ERNEST STREET, IN FRONT OF PUMPING STATION - IN PREPARATION OF PUMPING STATION MAKING REPAIRS TO PUMPS, WE REMOVED BULKHEAD FROM LINE INTO PUMP #4 AND BUILT BULKHEAD IN LINE AT PUMP #1. FURTHER ALONG THE LINES OF WORK DONE FOR PUMPING STATION IN ORDER FOR THEM TO MAKE REPAIRS TO PUMPS, WE BUILT BULKHEAD FOR PUMP #4; AND ON ANOTHER OCCASION WE BUILT BULKHEAD FOR PUMP #1; AND LATER REMOVED BULKHEAD AT PUMP #1 AND PLASTERED CONNECTION WALL.
10. NIAGARA AT RODMAN - IN CONNECTION WITH THE HIGHWAY PROGRAM TO ELIMATE BAD CURVE AT THIS LOCATION, WE PERFORMED THE FOLLOWING WORK: FOUR MANHOLES WERE FIRST SET TO TEMPORARY GRADE AND THEN REST TO FINAL GRADE; TWO NEW BASINS WERE BUILT WITH 36' OF CONNECTION TO EXISTING STORM LINE; THREE BASINS WERE REMODELED AS CENTER STREET BASINS AND FRAMED WITH MANHOLE FRAMES AND COVERS; AND FOUR NEW CHUTES WERE BUILT WITH 78' OF CONNECTIONS TO THE THEN EXISTING BASIN INLETS.
11. MUNICIPAL DOCK - BUILT TWO MANHOLES OVER VALVES ON DOCK AS PROTECTION AGAINST DAMAGE AND BREAKAGE. ALSO, BRICKED UP AND INSTALLED 5 MANHOLE FRAMES AND COVERS OVER POTHOLES AND OTHER OPENINGS AT HYDRANTS TO INSURE PROTECTION AGAINST BREAKAGE OF HYDRANTS ON DOCK.
12. ALLENS AVENUE AND ERNEST STREET - BUILT WEIR BULKHEAD IN STORM LINE MANHOLE TO KEEP SEWAGE FROM GOING INTO STORM LINE.
13. BUILT WEIRS IN SEWER LINES AT GLENBRIDGE AVENUE, EDDY STREET AT ERNEST STREET, AND HAMBURG AT BURLINGTON TO KEEP SEWAGE FROM OVERFLOWING INTO STORM LINE.
14. POINT AND EDDY STREETS - REPLACE AND RESET TIDE GATES AND LADDERS AT INTERSECTION.
15. KING STREET - RELAID 18 FT. OF 8 INCH SEWER LINE WITH 12 INCH PIPE.
16. CUMBERLAND STREET, 200' NORTH OF STONELAW AVE. - LOWERED SEWER LINE TO ACCOMMODATE 6" CONNECTIONS.
17. SOUTH WATER AT COLLEGE STREET - REPLACED BROKEN LADDERS ON BOTH TIDE GATES TO PREVENT OVERFLOW OF TIDE WATER INTO SANITARY LINE.
18. STEVENS STREET - RESET GATES, AND REPLACED HINGES AND LADDERS ON GATES.
19. MORRIS AVENUE (#124) - IN THE REMODELING OF BASIN, BUILT NEW GUTTER BOX AND CONNECTION AND ABANDONED CHUTE.
20. SUNBURY STREET - BUILT THREE NEW GUTTER GRATE BOXES AND REBUILT THREE BASINS TO NEW GRADE; AND ALSO, RESET ONE MANHOLE TO NEW GRADE, THIS WAS DONE TO RELIEVE SERIOUS CONDITIONS WHICH OCCUR IN THE CASE OF HEAVY STORMS.
21. SEWAGE DISPOSAL PLANT - INSTALLED 20' OF 8" SEWER LINE FROM LIMEHOUSE TO EJECTOR TO TAKE CARE OF PLANT DRAINAGE.
22. PERIODICALLY INSPECTED AND CLEANED CULVERTS AT GARFIELD, BROOK, MASHPAUG POND, YORK POND, OPHELIA BROOK AND KILLINGLY BROOK.

THE FOLLOWING IS A RESUME OF BASINS, GUTTER GRATES, AND SUMPS CLEANED AND DEPOSITS REMOVED; LINES FLUSHED; AND COMPLAINTS RECEIVED:

22,775 BASIN INSPECTIONS	
10,248 BASINS CLEANED	23,868.91 Cu.Yds.
100 SUMPS CLEANED	434.00 Cu.Yds.
1,185 GUTTER GRATES CLEANED	640.06 Cu.Yds.
1,126 COMPLAINTS RECEIVED	ALL CLEARED
LINES FLUSHED	23,961.00 FT.
11 OPEN DRAINS	81.25 Cu.Yds.

THE FOLLOWING IS A RESUME OF PRIVATE DRAIN INSPECTIONS MADE IN CONJUNCTION WITH PRIVATE DRAIN CONSTRUCTIONS AND ALTERATIONS:

STREET OPENINGS FOR PRIVATE DRAIN CONNECTIONS	137
INSPECTIONS AND RECORD SKETCHES FOR PRIVATE DRAIN CONSTRUCTION AND ALTERATIONS:	
ORIGINAL	210
EXTENSIONS	410

THE FOLLOWING IS A LISTING OF WORK PERFORMED IN CONJUNCTION WITH HIGHWAY ROAD PROGRAM:

BASINS BROUGHT TO NEW GRADE	49
MANHOLES BROUGHT TO NEW GRADE	591
INLET STONES SET TO NEW GRADE	1
GUTTER GRATES BROUGHT TO NEW GRADE	2

THE FOLLOWING IS A RESUME OF OIL AND GASOLINE INSPECTIONS MADE IN CONJUNCTION WITH CITY REGULATORY ORDINANCES; INSPECTIONS WERE PERTAINING TO FLOOR DRAINS IN SERVICE STATIONS, FACTORIES, AND OTHER PLACES OF BUSINESS.

THE INSPECTORS MADE 1508 VISITS AND FOUND ONLY A FEW INFRACTIONS OF THE LAW, ALL OF WHICH WERE PROMPTLY CORRECTED AFTER BEING NOTIFIED.

#### PUBLIC BUILDINGS SECTION

THIS SECTION IS RESPONSIBLE FOR THE PREPARATION OF PLANS AND SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE, REMODELING AND REPAIR OF ALL PUBLIC BUILDINGS OWNED BY THE CITY. A DRAFTING ROOM WHERE PLANS AND SPECIFICATIONS ARE PREPARED AND A SHOPS AND STORES ROOM ARE LOCATED IN THE WEST END OF THE MUNICIPAL GARAGE BUILDING ON ERNEST STREET.

THE BUILDING TRADES WORKERS EMPLOYED BY THE SECTION USE THE SHOP FOR FABRICATING SOME OF THE WOOD AND METAL FIXTURES USED IN THE RENOVATION AND REPAIR OF THE BUILDINGS. EMPLOYEES OF THE SECTION SUPERVISE THE VARIOUS CONSTRUCTION PROJECTS.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$ 78,557.85
ITEM 1 SERVICES OTHER THAN PERSONAL	4,222.47
ITEM 2 MATERIALS AND SUPPLIES	599.67
ITEM 3 SPECIAL ITEMS	62.20
	<hr/>
	\$ 83,442.19

DURING THE YEAR THE FOLLOWING WORK WAS ACCOMPLISHED BY THIS SECTION:

1. SUPERVISED REPAIRS AND ADDITIONS TO ALL BUILDINGS OF THE SCHOOL DEPARTMENTS, POLICE AND FIRE DEPARTMENT, RECREATION DEPARTMENT, TRAFFIC ENGINEERS DEPARTMENT, WELFARE DEPARTMENT, BATH HOUSES, COMFORT STATIONS, AND CITY HALL.
2. SUPERVISED THE CONSTRUCTION OF THE MARY E. FOGARTY ELEMENTARY SCHOOL, THE CAMDEN AVENUE SCHOOL, AND THE DANFORTH STREET RECREATION CENTER, ALL OF WHICH ARE NOW UNDER CONSTRUCTION.
3. PREPARED PLANS AND SPECIFICATIONS FOR ROOFING REPAIRS, SHEET METAL AND MISCELLANEOUS REPAIRS AT SEVERAL SCHOOLS AND SUPERVISED THE PREPARATION OF PLANS AND SPECIFICATIONS AND SUPERVISED WORK FOR ADDITIONAL ROOFING REPAIRS BY OUTSIDE ARCHITECTS.
4. PREPARED PLANS AND SPECIFICATIONS AND SUPERVISED WORK UNDER THE SCHOOL MODERNIZATION PROGRAM FOR INSTALLATION OF INTERIOR FIRE ALARM SIGNAL SYSTEMS AT SCHOOLS AS REQUESTED BY THE SCHOOL DEPARTMENT.
5. PREPARED PLANS AND SPECIFICATIONS, SUPERVISED INSTALLATION OF WORK AT THE SCHOOLS AS REQUESTED BY THE SCHOOL DEPARTMENT INCLUDING PLASTERING WORK, PAINTING, PLUMBING, ELECTRICAL WORK, REPAIRS TO HEATING SYSTEMS, PAVING FOR YARDS AND DRIVEWAYS, AND NEW FENCE WORK.
6. PREPARED PLANS AND SPECIFICATIONS, SUPERVISED WORK BEING DONE ON THE ALTERATIONS TO AN INFANT FORMULA ROOM AT THE CHARLES V. CHAPIN HOSPITAL.
7. SET UP EQUIPMENT AND MATERIAL NECESSARY FOR THE SEPTEMBER PRIMARY ELECTION FOR THE BOARD OF CANVASSERS.
8. SUPERVISED ALTERATIONS AND REPAIRS AT THE CITY HALL AND AT 141 FOUNTAIN STREET INCLUDING ROOF REPAIRS, EMERGENCY ELECTRICAL REPAIRS, INSTALLATION OF LIGHTING FIXTURES IN THE CONTROLLERS OFFICE, PLASTER WORK, REPAIRS TO WINDOWS, PLUMBING REPAIRS, BOILER REPAIRS AND PAINTING.
9. SUPERVISED EXTENSIVE HEATING REPAIRS AT THE POLICE AND FIRE HEADQUARTERS AT LA SALLE SQUARE AND SUPERVISED WORK DONE BY EMPLOYEES OF THIS DIVISION AND ALSO BY OUTSIDE FIRMS ON REPAIRS TO PLUMBING AND HEATING, ROOF REPAIRS AT FIRE AND POLICE STATIONS AS REQUESTED BY THE BUREAU OF POLICE AND FIRE.
10. REPAIRED ROOF, REPAIRED AND PAINTED FLAG POLE AT VETERANS ADMINISTRATION BUILDING (OLD HOPE HIGH SCHOOL).
11. REPAIRED GAS BURNER AND ELECTRIC SYSTEM; INSTALLED WATER SUPPLY AND METAL DOORS AT ANIMAL CREMATORY ON RESERVOIR AVENUE.
12. PLUMBING, HEATING, AND ELECTRICAL REPAIRS WERE MADE TO THE BATH HOUSES AND COMFORT STATIONS.
13. SUPERVISED COMPLETION OF CONSTRUCTION AT THE JOSLIN PARK PLAYGROUND AND METCALF FIELD, AND VARIOUS MINOR REPAIRS AT THE SOUTH PROVIDENCE PLAYGROUND.
14. REPAIRED PLUMBING, HEATING, AND ELECTRICAL SYSTEMS AT MANY CITY RECREATION BUILDINGS AND PLAYGROUNDS. ALSO, INSTALLED NEW BACKSTOPS AND FENCES.



THE FOLLOWING TABLE SHOWS THE TOTAL NUMBER OF CRAFT PASSING THROUGH THE DRAWBRIDGES BEGINNING THE YEAR 1907.

FROM 1907 TO 1928 INCLUSIVE, YEARS ENDING DECEMBER 31.

YEAR 1929 INCLUDES 9 MONTHS ONLY, AND ENDS SEPTEMBER 30.

1930 TO DATE, YEARS END SEPTEMBER 30.

YEAR	POINT	RED	YEAR	POINT	RED
	STREET	BRIDGE		STREET	BRIDGE
1907	25,949	2,632	1933-34	1,990	3,750
1908	21,767	4,052	1934-35	1,307	2,454
1909	17,128	6,914	1935-36	1,468	2,150
1910	17,125	2,927	1936-37	1,368	2,130
1911	20,078	3,293	1937-38	1,136	1,913
1912	21,519	3,021	1938-39	1,576	2,187
1913	15,113	2,734	1939-40	1,299	3,431
1914	13,364	2,491	1940-41	1,066	2,420
1915	14,409	2,755	1941-42	1,205	1,722
1916	11,638	3,360	1942-43	1,263	1,087
1917	9,704	3,273	1943-44	1,487	2,262
1918	6,894	2,600	1944-45	1,233	1,319
1919	7,123	3,476	1945-46	1,078	1,828
1920	6,950	4,451	1946-47	936	1,640
1921	6,067	2,001	1947-48	1,010	1,541
1922	5,307	2,958	1948-49	666	2,130
1923	5,476	5,134	1949-50	638	1,609
1924	4,858	2,035	1950-51	371	1,973
1925	4,939	1,942	1951-52	125	1,628
1926	5,198	2,415	1952-53	202	1,752
1929	4,700	2,934	1953-54	51	2,787
1928	4,679	3,912	1954-55	883	1,313
1929	4,068	3,623	1955-56	141	1,536
1929-30	3,210	2,738	1956-57	16	1,189
1930-31	3,243	2,742	1957-58	9	1,076
1931-32	1,197	1,900	1958-59	6	1,021
1932-33	1,327	2,787	1959-60	0	758

BRIDGE	GREATEST NUMBER OF OPENINGS IN ANY ONE DAY		DAILY AVERAGE NUMBER OF OPENINGS FOR THE YEAR	
	1958-59	1959-60	1958-59	1959-60
	RED	10	8	1.95
POINT	1	0	0.008	0.00

#### STREET LIGHTING SECTION

THIS SECTION IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE ELECTRIC LIGHTING FACILITIES FOR THE STREETS, BRIDGES, SUBWAYS AND PARKS OF THE CITY. THE ACTUAL CONSTRUCTION AND MAINTENANCE WORK IS PERFORMED THROUGH CONTRACT BY THE NARRAGANSETT ELECTRIC CO. THE APPROPRIATION FOR THE ACCOMPLISHMENT OF THIS WORK FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1960 WAS \$527,226.20.

THE EXPENDITURES OF THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$ 4,472.34
ITEM 1 SERVICES OTHER THAN PERSONAL	461,608.19
TOTAL	\$466,080.53

REVENUE: \$102.91

#### STREET LIGHTING COSTS:

#### INCANDESCENTS & MERCURY'S

1959	TOTAL BILL	LESS OUTAGE	NET COST
OCTOBER	\$40,596.46	\$ 80.69	\$40,515.77
NOVEMBER	40,635.42	83.00	40,552.42
DECEMBER	40,839.07	152.89	40,686.18
1960			
JANUARY	41,350.86	144.67	41,206.19
FEBRUARY	41,306.18	160.72	41,145.46
MARCH	41,312.90	112.81	41,200.09
APRIL	40,664.22	84.66	40,579.56
MAY	40,730.15	75.62	40,654.53
JUNE	41,140.03	60.45	41,079.58
JULY	40,674.26	76.45	40,597.81
AUGUST	40,661.01	90.37	40,570.64
SEPTEMBER	41,139.46	115.64	41,023.82
	\$461,050.02	\$ 1,237.97	\$459,812.05

\*NEW RATES:

THE JUNE BILL AMOUNTED TO \$40,687.11 AND A TOTAL FUEL ADJUSTMENT FROM JANUARY 1,1958 TO MARCH 31,1960 FOR THE AMOUNT OF \$26,547.08 WAS CREDITED LEAVING THE REMAINING BALANCE OF \$14,140.03.

AS OF APRIL 1,1960, THE FUEL CLAUSE WILL BE BASED ON A STANDARD NET TON FUEL PRICE OF \$10.75.

\*\*HURRICANE:

THE TOTAL BILL FOR SEPTEMBER WAS \$40,693.98. HOWEVER, DUE TO THE HURRICANE DONNA, THE CITY OF PROVIDENCE WAS ALLOWED AN OUTAGE CREDIT OF \$2,554.52 WHICH LEFT THE TOTAL OF \$38,139.46 AS SHOWN.

POLICE REPORT ON OUTAGES

- (1) LIGHTS OUT ALL NIGHT, BUT ONLY DEDUCTED AT POLICE REPORT OBSERVATION TIME.
- (2) LIGHTS OUT SUCCESSIVE NIGHTS, NO REPORT OF OUTAGES.

ARTICLE #0 PROPOSED CONTRACT AGREEMENT CITY OF PROVIDENCE-NARRAGANSETT ELECTRIC (STREET LIGHTING).

THE POLICE DEPARTMENT SHALL REPORT DAILY TO SAID PUBLIC SERVICE ENGINEER ALL OUTAGES AND THE DURATION THEREOF SO FAR AS OBSERVED OR KNOWN BY MEMBERS OF SAID DEPARTMENT. A DEDUCTION SHALL BE MADE FROM THE MONTHLY PAYMENT FOR SUCH LAMPS EQUAL TO THE PORTION OF THE ANNUAL PRICE OF SUCH LAMP, AS SHALL BE EQUAL TO THE RATIO THAT SUCH TIME OF OUTAGE BEARS TO THE TOTAL ANNUAL BURNING TIME SET FORTH IN PARAGRAPH #13 HEREOF FOR SUCH LAMPS.

NO DEDUCTION IS ALLOWED FOR CURRENT ORDERED STOPPED IN CASE OF FIRE OR OTHER DANGER BY ANY OFFICIAL OF THE CITY IN THE PERFORMANCE OF HIS DUTY, OR LAMPS OUT THROUGH MALICIOUS BREAKAGE FOR SUCH TIME AS IS NECESSARY TO REPLACE OR REPAIR THE SAME SET FORTH IN PARAGRAPH #13 HEREOF FOR SUCH LAMP.

NEIGHBORHOOD	LIGHTS	COST PER YEAR	COST PER NIGHT
OVERHEAD	1000 LUMENS	\$ 15.90	\$ .04
UNDERGROUND	1000 LUMENS	28.93	.08
OVERHEAD	2500 LUMENS	31.80	.09
OVERHEAD	15000 LUMEN MERCURYS	71.08	.19
UNDERGROUND	15000 LUMEN MERCURYS (DOWN TOWN)	91.08	.25
<u>ROGER WILLIAMS PARK</u>			
UNDERGROUND	1000 LUMEN 1/2 NIGHT	\$ 25.03	.07

CITY TAXPAYERS ARE CONSTANTLY REPORTING LIGHTS OUT FOR ONE OR SUCCESSIVE NIGHTS TO EITHER THIS DEPARTMENT OR THE UTILITY COMPANY WHICH DO NOT SHOW ON OUR OUTAGE SHEETS. SO, CONSEQUENTLY, THEY ARE NOT DEDUCTABLE.

MALL PARKING DECK LIGHTS  
1 FRANCIS STREET

THE MALL PARKING DECK LIGHTS ARE CHARGED TO THE GENERAL STREET LIGHTING ACCOUNT. HOWEVER, THEY WILL NOT SHOW ON THE SCHEDULE BECAUSE THEY ARE ON A SEPARATELY-METERED CIRCUIT AND DO NOT COME UNDER THE CONTRACT PRICE PER LIGHT UNIT. THEY ARE METERED ON A "G" RATE, AND SO MUCH PER K.W.

<u>NO. OF LIGHTS</u>	<u>TYPE OF LIGHT</u>	<u>HOURS OF BURNING</u>
12 U.G.	20,000 LUMEN M.V.	24 HOURS
14 U.G. A.N.	20,000 LUMEN M.V.	PREDETERMINED FT. CANDLE LEVEL
18 U.G. A.N.	2,500 LUMEN INC.	PREDETERMINED FT. CANDLE LEVEL

THE 6 U.G. A.N. 20,000 LUMEN M.V. LIGHTS ON THE TOP DECK ARE SEPARATELY METERED AND CHARGED TO THE MEYERS BROTHERS' PARKING SYSTEM.

MONTHLY CHARGES

<u>MONTH</u>	<u>K.W. USED</u>	<u>BILL</u>
OCTOBER, 1959	5460 K.W.	\$108.58
NOVEMBER, 1959	5080 K.W.	95.13
DECEMBER, 1959	5120 K.W.	95.17
JANUARY, 1960	5800 K.W.	102.04
FEBRUARY, 1960	5180 K.W.	95.84
MARCH, 1960	4900 K.W.	93.01
APRIL, 1960	5240 K.W.	97.42
MAY, 1960	4780 K.W.	92.76
JUNE, 1960	4200 K.W.	87.17
JULY, 1960	5220 K.W.	92.77
AUGUST, 1960	4680 K.W.	87.41
SEPTEMBER, 1960	3120 K.W.	71.44
		<u>\$1,118.74</u>

SIGN INSPECTION

SIGNS INSPECTED FOR OVERHEAD WIRE CLEARANCE

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NUMBER AND KIND OF STREET LIGHTING UNITS IN SERVICE IN PROVIDENCE SINCE 1928

YEAR	ARCS		INCANDESCENTS				SODIUM		MERCURY				
	BRIDGE STRUCTURE 24 HR.	BURNING	1520	1700CP.	2500CP.	400CP.	750W.	300W	1000CP.	600CP.	1000CP.	400W	6800LUM.
1928			1739	8605	6	8	10	10	48				
1929			1749	8720	9	14	10	15	48				
1930			1779	8704	8	14	10	15	48				
1931			1771	8748	8	14	10	15	78				
1932			1758	8699	8	16	10	15	118				
1933			1758	8702	8	16	10	15	118				
1934			1746	8709	0	16	10	15	130				
1935			1746	8727	8	16	10	14	130				
1936			1697	8691	0	16	9	14	214				
1937			1697	8703	8	16	9	14	214				
1938			1628	8724	8	16	9	14	320				
1939			1626	8735	8	16	9	14	320				
1940			1619	8746	8	16	9	14	331	29	25		
1941			1513	8727	8	16	9	14	508	29	25		
1942			1513	8731	8	16	9	14	598	29	25		
1943			1513	8731	8	16	9	14	540	29	25		
1944			1499	8741	8	16	9	14	540	29	25		
1945			1485	8756	8	16	9	14	540	29	25		
1946			1364	8513	0	104	9	14	554	29	26	19	
1947			1264	8709	8	69	9	14	568	29	26	179	
1948			1199	8687	0	16	9	14	568	29	26	256	
1949			750	8624	115	16	9	14	536	29	25	1049	
1950			514	8701	116	14	9	14	550	29	25	1556	
1951			298	8721	162	14	9	14	560	29	25	1855	
1952			124	8668	226	9	0	0	565	29	25	2360	
1953			36	8671	251	1	0	0	504	29	25	2802	
1954	44	0	8308	312	0	0	0	0	506	29	25	3293	
1955	44	0	8277	414	0	0	0	0	449	29	25	3420	
1956	44	0	8228	447	0	0	0	0	435	29	25	3476	
1957	44	0	8248	489	0	0	0	0	391	29	25	3501	
1958	44	0	8192	484	0	0	0	0	349	29	25	3570	
1959	44	0	8236	512	0	0	0	0	348	29	22	3593	7
1960	44	0	8244	519	0	0	0	0	345	29	22	3623	42

RECAPITULATION

GRAND TOTAL	\$459,812.05
TOTAL MONTHLY AVERAGE COST 1950-1959	41,687.27
TOTAL MONTHLY AVERAGE COST 1959-1960	38,317.67
DECREASE FROM PREVIOUS YEAR OF THE TOTAL COSTS OF STREET LIGHTING	40,435.16
TOTAL SAVINGS IN OUTAGES	1,237.97

<u>NEW STREET LIGHT PETITIONS RECEIVED</u>	<u>GRANTED</u>	<u>REJECTED</u>	<u>HOLD</u>
57	54	2	1
<u>UTILITY POLE PETITIONS RECEIVED AND FIELD CHECKED</u>	181		

SUMMARY

TWENTY-THREE (23) 15,000 LUMEN MERCURY VAPOR LIGHTS HAVE BEEN PUT INTO SERVICE IN PUBLIC PLACES DURING THE FISCAL YEAR. THERE ARE NOW 3,623 SUCH LIGHTS IN PUBLIC USE IN THE CITY.

THERE ARE NOW FORTY-TWO (42) 7000 LUMEN MERCURY VAPOR LIGHTS IN SERVICE.

THE NUMBER OF 2,500 LUMEN INCANDESCENT LIGHTS HAVE BEEN INCREASED BY SEVEN (7), BRINGING THE TOTAL NUMBER OF THIS TYPE OF LIGHT NOW IN USE TO 519.

THERE ARE 345 - 10,000 LUMEN LIGHTS IN SERVICE IN THE CITY THAT WILL BE REPLACED WITH 15,000 LUMEN MERCURY VAPOR LIGHTS IN THE NEAR FUTURE.

THERE ARE 8244 - 1000 LUMEN LIGHTS IN SERVICE (FAMILIAR NEIGHBORHOOD TYPE). THIS TYPE SHOWS AN INCREASE OF 8 LIGHTS OVER THE TOTAL FOR THE PREVIOUS YEAR. THERE HAVE BEEN 50 LIGHTS OF THIS TYPE INSTALLED DURING THE PAST FISCAL YEAR, ON STREET LIGHT PETITIONS.

SHOPS AND STORES

THE CONSTRUCTION AND MAINTENANCE SHOPS & STORES SERVICES COMPLETELY ALL SECTIONS OF THE PUBLIC WORKS DEPARTMENT, EXCEPT THE SANITATION DIVISION AND THE SEWER CONSTRUCTION AND MAINTENANCE SECTION.

THE SEWER CONSTRUCTION AND MAINTENANCE SHOPS AND STORES SERVICES ONLY THE SEWER CONSTRUCTION AND MAINTENANCE SECTION AND THE PASSENGER CAR RENTED TO THE CONSTRUCTION AND MAINTENANCE ADMINISTRATION.

ALL AUTOMOTIVE CONSTRUCTION AND MAINTENANCE EQUIPMENT IS FURNISHED TO THE SECTION REQUIRING ITS USE ON A RENTAL BASIS. THESE RENTAL PAYMENTS ARE SHOWN AS RECEIPTS IN THE REVOLVING FUND WHICH TOGETHER WITH THE MONEY RECEIVED FOR STOCK ORDERS AND JOB ORDERS, COMPRISE THE MONEY USED FOR DEFRAYING THE OPERATING COSTS AND THE PURCHASE COSTS FOR THE RENTAL EQUIPMENT OF THESE SECTIONS.

A DETAILED RESUME OF THE ACTIVITIES OF EACH SECTION IS AS FOLLOWS:

CONSTRUCTION AND MAINTENANCE SHOPS AND STORES

THIS SECTION HAS NO BUDGET ALLOWANCE. ALL EXPENSES FOR LABOR AND MATERIALS ARE PAID FOR WITH THE MONEY RECEIVED FROM THE EQUIPMENT RENTALS, AND FROM STOCK AND JOB ORDERS TOGETHER WITH THE INITIAL CAPITAL APPROPRIATED.

THIS SECTION IS RESPONSIBLE FOR PROCURING, SERVICING, MAINTAINING AND REPAIRING ALL EQUIPMENT, MATERIALS AND SUPPLIES REQUIRED BY THE FOLLOWING SECTIONS AND DIVISIONS:

PUBLIC WORKS ADMINISTRATION	BRIDGE MAINTENANCE SECTION
PUBLIC SERVICE ENGINEER	SNOW REMOVAL SECTION
ENGINEERING OFFICE	FORESTRY SECTION
BUSINESS MANAGEMENT OFFICE	SIDEWALKS AND CURBING SECTION
HIGHWAY SECTION	PUBLIC BUILDINGS SECTION
DRAW BRIDGE OPERATION SECTION	STREET CLEANING SECTION
STREET LIGHTING SECTION	FAMILY RELOCATION SERVICE

ALL AUTOMOTIVE AND MOBILE OR PORTABLE CONSTRUCTION AND MAINTENANCE EQUIPMENT USED BY THE ABOVE AGENCIES IS OBTAINED FROM THIS SECTION AND PAID FOR ON A RENTAL BASIS.

A LIST OF THE AVAILABLE RENTAL EQUIPMENT IS AS FOLLOWS:

2 TANK TRUCKS	1 HOIST TRUCK 5000#
2 COMPRESSORS, TRUCK MOUNTED	2 BULLDOZERS TD 18
33 DUMP TRUCKS 4 CU. YDS.	1 SKY WORKER
6 DUMP TRUCKS 6 CU. YDS.	1 WELDER, ELECTRIC PORTABLE
5 DUMP TRUCKS 3 CU. YDS.	2 SHOVELS 3/4 CU. YDS.
3 PICKUP TRUCKS 3/4 TON	5 ROAD GRADERS
1 STAKE BODY TRUCK 1 TON	2 MIST SPRAYERS
1 PANEL TRUCK 1/2 TON	2 CONCRETE MIXERS 3 S
1 EXPRESS BODY TRUCK 2 1/2 TON	9 STREET SWEEPERS
1 EXPRESS BODY TRUCK 1/2 TON	9 SNOW LOADERS
3 CARGO TRUCKS 6 TON	5 LAWN MOWERS - POWER
10 PASSENGER CARS	19 TAIL GATE SPREADERS
7 AIR COMPRESSORS - PORTABLE	80 SNOW PLOWS
1 TRAILER 25 TON FLATBED WITH TRACTOR	3 FRONT END LOADERS
1 GRADALL	2 TRACTORS
1 STATION WAGON	2 ROLLERS 10-14 TON TANDEM
2 HOIST TRUCKS 2500#	1 FORK LIFT
1 ROLLER 8-12 TON TANDEM	1 ROLLER 10-12 TON TANDEM
1 ROLLER 10-12 TON 3 WHEEL	1 PAVER, ASPHALT
1 ROLLER 305 TON PORTABLE	3 TOOL HEATERS
3 WALTERS SNOW FIGHTERS	5 GENERATORS, PORTABLE
2 ROLLERS 305 TON TANDEM	6 TOOL WAGONS
	3 LEAF COLLECTORS

THIS EQUIPMENT IS SERVICED AND REPAIRED IN THE REPAIR SHOP BY PERSONNEL OF THIS SECTION.

DURING THE YEAR THE FOLLOWING NEW EQUIPMENT WAS PURCHASED BY THE SECTION AND INCORPORATED IN THE RENTAL POOL:

1 ROLLER, 10-14 TON	1 ROLLER 305 TON, PORTABLE
7 DUMP TRUCKS 4 CU. YDS.	1 SWEEPER
1 TOOL WAGON	1 HOIST TRUCK 2500#
3 PASSENGER CARS	1 FRONT END LOADER
1 ROAD GRADER	

IN ADDITION TO THE RENTAL EQUIPMENT IN THE POOL THIS SECTION ALSO SERVICES, REPAIRS AND MAINTAINS THE FOLLOWING EQUIPMENT FOR THE SECTIONS SHOWN:

1 FORK LIFT  
 1 AIR COMPRESSOR  
 1 EMERGENCY MOTOR & GENERATOR  
 1 BULLDOZER TD 9  
 2 BUCKETS, CLAMSHELL  
 4 BUCKETS, ORANGE PEEL  
 1 ROLLER 5-TON TANDEM

AUTOMOTIVE REPAIR SHOP  
 PAINT SHOP  
 POINT STREET BRIDGE  
 CITY DUMP  
 INCINERATOR  
 SEWER MAINTENANCE SECTION  
 RECREATION DEPARTMENT

THE CARPENTER SHOP, BLACKSMITH SHOP, PAINT SHOP AND MACHINE SHOP FACILITIES ARE USED TO PERFORM TASKS REQUIRED BY ALL THE SECTIONS LISTED ABOVE AS WELL AS OTHER CITY AGENCIES.

THE AGENCY PAYS FOR THE ACTUAL COST OF THE LABOR AND MATERIALS USED PLUS A 10% MARK-UP TO TAKE CARE OF THE HANDLING CHARGES.

THE STOCK ROOM CARRIES MUCH OF THE MATERIALS, PARTS AND SUPPLIES REQUIRED BY THE SECTIONS OF THE DIVISION. AN INVENTORY OF \$54,510.80 IN MATERIALS AND SUPPLIES AND PARTS WAS ON HAND IN THE STOCK ROOM ON SEPTEMBER 30, 1960.

#### SEWER CONSTRUCTION AND MAINTENANCE SHOPS AND STORES

THIS SECTION HAS NO BUDGET ALLOWANCE. ALL OPERATING EXPENSES FOR LABOR AND MATERIALS ARE PAID FOR WITH THE MONEY RECEIVED FROM THE EQUIPMENT RENTALS AND FOR THE STOCK AND JOB ORDERS TOGETHER WITH THE INITIAL CAPITAL APPROPRIATED.

THIS SECTION IS RESPONSIBLE FOR PROCURING, SERVICING, MAINTAINING AND REPAIRING ALL EQUIPMENT, MATERIALS AND SUPPLIES REQUIRED BY THE CONSTRUCTION AND MAINTENANCE ADMINISTRATION AND THE SEWER CONSTRUCTION AND MAINTENANCE SECTION. ALL AUTOMOTIVE AND CONSTRUCTION EQUIPMENT USED BY THESE SECTIONS IS OBTAINED FROM THIS SECTION ON A RENTAL BASIS.

A LIST OF AVAILABLE RENTAL EQUIPMENT IS AS FOLLOWS:

4 EDUCTORS	4 AIR COMPRESSORS - PORTABLE
3 DERRICK TRUCKS	2 CENTRIFUGAL PUMPS (6 IN.)
3 PASSENGER CARS	1 CENTRIFUGAL PUMP (4 IN.)
4 DUMP TRUCKS	2 CENTRIFUGAL PUMPS (3 IN.)
2 CARGO TRUCKS (2 TON)	1 DIAPHRAGM PUMP (4 IN.)
1 CARGO TRUCK (1 TON)	1 CENTRIFUGAL PUMP (1½ IN.)
1 PICKUP TRUCK	1 SEWER ROD POWER DRIVER
1 SET OF SEWER WENCHES	1 DIAPHRAGM PUMP (3 IN.)
1 ELECTRIC GENERATOR	

THIS EQUIPMENT IS SERVICED AND REPAIRED IN THE SHOPS BY PERSONNEL OF THIS SECTION.

DURING THE YEAR THE FOLLOWING EQUIPMENT WAS PURCHASED:

1 CENTRIFUGAL PUMP (3 IN.)	1 ELECTRIC GENERATOR
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IN ADDITION TO THE RENTAL EQUIPMENT IN THE POOL THIS SECTION THROUGH ITS CARPENTER AND BLACKSMITH SHOPS REPAIRS AND MAINTAINS ALL TOOLS, BUILDINGS, SEWER GATES, ETC., FOR WHICH THE SEWER MAINTENANCE SECTION IS RESPONSIBLE. SOME WORK FOR AGENCIES OUTSIDE THE SEWER MAINTENANCE SECTION IS PERFORMED PRIMARILY BY THE CARPENTER SHOP.

THE WORK IN EITHER CASE IS PAID FOR BY THE AGENCY CONCERNED, BY PAYING FOR THE TOTAL COST OF BOTH LABOR AND MATERIALS PLUS 10% OF THE TOTAL COST. THE REVENUE THUS EARNED IS USED TO DEFRAY THE COST OF OPERATION PLUS THE COST OF EQUIPMENT REPLACEMENT.

THE STOCK ROOM CARRIES MUCH OF THE MATERIALS, PARTS, AND SUPPLIES REQUIRED BY THE SEWER MAINTENANCE SECTION.

AN INVENTORY OF \$23,951.71 IN MATERIALS AND SUPPLIES AND PARTS WAS ON HAND IN THE STOCK ROOM ON SEPTEMBER 30, 1960.

#### RECOMMENDATIONS

1. NEW FENCES SHOULD BE BUILT ON THE BRIDGE AT MARKET SQUARE BETWEEN WESTMINSTER STREET AND EXCHANGE PLACE.
2. SIDEWALKS ON THE FOLLOWING BRIDGES - ACORN STREET, DELAINE STREET, GLENDRIDGE AVENUE, WEST RIVER STREET, AND RED BRIDGE - SHOULD BE COMPLETELY REBUILT.
3. LELAND STREET FOOTBRIDGE SHOULD BE REBUILT. THE FLOATING DOCK AT THE HARBOR MASTER'S WHARF AT POINT AND SOUTH WATER STREETS IS COMPLETELY GONE AND A NEW ONE SHOULD BE BUILT.
4. THE UNDERSIDE OF THE BRIDGE IN POST OFFICE SQUARE, MARKET SQUARE AND CRAWFORD STREET AREA SHOULD BE THOROUGHLY SCRAPPED AND PAINTED.

5. THE STEEL WORK ON THE SHORE SPANS OF RAD BRIDGE IS IN VERY POOR CONDITION AND THE WHOLE BRIDGE SHOULD BE SCRAPPED AND PAINTED. AT PRESENT THERE ARE 16 WOOD BEAMS BESIDE EACH OF THE RUSTED BEAMS TO ASSURE ADEQUATE SUPPORT. 32 NEW STEEL CROSS BRACES HAVE BEEN ERECTED IN PLACE OF THE RUSTED OUT BRACES. MANY OF THE HORIZONTAL MEMBERS HAVE BEEN PATCHED BY WELDING PIECES OF STEEL TO DETERIORATED STEEL WORK. A START HAS ALSO BEEN MADE ON PAINTING THE UNDER STRUCTURE OF THE BRIDGE. HOWEVER, MUCH MORE REPAIR WORK IS REQUIRED TO ASSURE CONTINUOUS USAGE.
6. RECOMMEND THAT ONE OF THE FIVE ROAD GRADERS BE REPLACED. TWO OF THESE REQUIRE EXTENSIVE REPAIRS AND THE STEPPED UP REPLACEMENT PLAN SHOULD CONTINUE SO AS TO CUT DOWN THE COST OF OPERATION. ONE GRADER WAS REPLACED DURING THE PAST YEAR.
7. A NEW FENCE IS REQUIRED ALONG THE RAILROAD RETAINING WALL ON HARRIS AVENUE.
8. THE 1951 LORAIN SHovel IS IN NEED OF CONSTANT REPAIRS AND SHOULD BE REPLACED WITH A HEAVY 3/4 YD. SHOVEL NOT LESS THAN 45,000# IN WEIGHT.
9. TWO NEW PUMPS SHOULD BE PURCHASED FOR THE SEWER MAINTENANCE SECTION, 1 - 6" 90M AND 1 - 4" 30M.
10. NEW FACILITIES FOR USE OF THE HIGHWAY, BRIDGE MAINTENANCE, STREET CLEANING AND CONSTRUCTION SHOPS AND STORES ARE BEING BUILT TO REPLACE PRESENT FACILITIES WHICH ARE IN THE PATH OF THE PROPOSED NORTH-SOUTH FREEWAY. AT PRESENT THESE AGENCIES ARE SCATTERED AND HOUSED TEMPORARILY IN VARIOUS TEMPORARY, INADEQUATE QUARTERS.
11. MERINO PARK FOOTBRIDGE SHOULD BE COMPLETELY REBUILT. THE PILES AND STRINGERS ARE IN VERY BAD CONDITION. THIS BRIDGE WAS SHORTENED BY 50 FT. THIS YEAR AND WE PLAN TO CUT OFF 20 FT. FROM THE SOUTH END. THIS WILL LEAVE A BRIDGE 50 FT. LONG TO BE REPLACED.
12. A MAINTENANCE GANG OF ABOUT 1 FOREMAN AND 6 MEN SHOULD BE SET UP FOR THE CONSTRUCTION AND MAINTENANCE DIVISION TO MAINTAIN THE BUILDINGS OF THE PUBLIC WORKS DEPARTMENT SUCH AS THE STORAGE AND TRANSIT SHEDS AT FIELDS POINT, FIELDS POINT DOCK OFFICE, HARBOR MASTER'S BUILDING, HOUSE AND BUILDING AT RED BRIDGE, BRICK BUILDINGS AT SEWER SYPHON ON INDIA STREET AND GLOBE STREET, INCINERATOR BUILDINGS, INCINERATOR GARAGE, SEWER MAINTENANCE BUILDINGS, HIGHWAY BUILDINGS, FORESTRY BUILDING AND RAILROAD TRACKS AT FIELDS POINT, THE WASHINGTON PARK PUMPING STATION, THE RESERVOIR AVENUE PUMPING STATION, AND THE ERNEST STREET PUMPING STATION.

THERE ARE MANY ITEMS THAT SHOULD BE MAINTAINED OR REPAIRED AT THE PRESENT TIME. SOME OF THIS WORK HAS OR IS PRESENTLY BEING ACCOMPLISHED BY THE BRIDGE MAINTENANCE GANG AND THE CARPENTERS AND MASONS FOR THE SEWER SHOPS AND STORES AND THE CONSTRUCTION AND MAINTENANCE SHOPS AND STORES; BUT IT COULD BE BETTER ACCOMPLISHED BY ASSIGNING A DEFINITE RESPONSIBILITY FOR THIS WORK.

RESPECTFULLY SUBMITTED,

ROBERT B. STRONG, CHIEF  
CONSTRUCTION AND MAINTENANCE DIVISION.

SANITATION DIVISION

MR. CHARLES F. MCELROY,  
DIRECTOR OF PUBLIC WORKS,  
CITY HALL, PROVIDENCE, R.I.

DEAR SIR:

I RESPECTFULLY SUBMIT THE ANNUAL REPORT OF THE SANITATION DIVISION OF THE PUBLIC WORKS DEPARTMENT FOR THE FISCAL YEAR 1959 - 1960. THIS DIVISION IS DIVIDED INTO THE FOLLOWING SECTIONS:

SANITATION ADMINISTRATION	SEWAGE DISPOSAL
STREET CLEANING	REFUSE COLLECTION AND DISPOSAL
SEWAGE PUMPING STATION	GARBAGE COLLECTION AND DISPOSAL
SANITATION SHOP & STORES	

SANITATION ADMINISTRATION

THE OFFICE PERSONNEL PERFORMS ALL THE NECESSARY CLERICAL WORK PERTAINING TO THE REFUSE COLLECTION AND DISPOSAL SECTION, THE SEWAGE PUMPING STATION SECTION, THE SANITATION SHOP AND STORES AND A PORTION OF THE WORK PERTAINING TO THE SEWAGE DISPOSAL WORKS SECTION. CONDENSED RECORDS FROM ALL SECTIONS ARE MAINTAINED AND FILED IN THIS OFFICE FOR REFERENCE.

THE EXPENDITURES FOR THIS SECTION FOR THE FISCAL YEAR WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$11,808.34
ITEM 1 SERVICES OTHER THAN PERSONAL	656.85
ITEM 2 MATERIALS AND SUPPLIES	<u>15.39</u>
TOTAL	\$12,480.58

STREET CLEANING SECTION

THIS SECTION IS RESPONSIBLE FOR THE CLEANING OF ALL STREETS AND HIGHWAYS WITHIN THE CITY AND THE MAINTENANCE AND CARE OF ALL THE TRASH CANS SITUATED BOTH DOWNTOWN AND IN THE OUTLYING SECTIONS OF THE CITY.

THE STREETS IN THE DOWNTOWN SECTION OF THE CITY, BOUNDED BY DYER STREET, SOUTH MAIN STREET, WASHINGTON ROW, UNION STATION, WEST EXCHANGE STREET, ABORN STREET, EMPIRE STREET, CHESTNUT STREET AND CLIFFORD STREET ARE CLEANED DAILY.

THE FOLLOWING STREETS ARE ALSO CLEANED DAILY:

BROADWAY FROM LASALLE SQUARE TO OLNEYVILLE SQUARE  
WESTMINSTER STREET FROM EMPIRE STREET TO HOYLE SQUARE  
WEYBOSSET STREET FROM EMPIRE STREET TO CATHEDRAL SQUARE  
BROAD STREET FROM EMPIRE STREET TO TRINITY SQUARE  
ATWELLS AVENUE FROM ABORN STREET TO RIDGE STREET  
POCASSET AVENUE FROM OLNEYVILLE SQUARE TO CITY LINE.  
WILLARD AVENUE FROM GAY STREET TO PRAIRIE AVENUE  
RANDALL STREET FROM CHARLES STREET TO NORTH MAIN STREET  
SMITH STREET FROM STATE HOUSE TO OAKLAND AVENUE  
DOUGLAS AVENUE FROM ADMIRAL STREET TO MOWRY STREET  
PLAINFIELD STREET FROM HARTFORD AVENUE TO WEBSTER AVENUE  
GAY STREET FROM WILLARD AVENUE TO BLACKSTONE STREET  
NORTH MAIN STREET FROM COLLEGE HILL TO MILL STREET  
CHARLES STREET FROM RAILROAD BRIDGE TO CITY LINE  
SOUTH MAIN STREET FROM COLLEGE HILL TO POINT STREET  
WICKENDEN STREET FROM EAST STREET TO IVES STREET  
IVES STREET FROM WICKENDEN STREET TO POWER STREET  
GOVERNOR STREET FROM WICKENDEN STREET TO POWER STREET  
WAYLAND AVENUE FROM WATERMAN STREET TO ANGELL STREET  
SOUTH ANGELL STREET FROM WAYLAND AVENUE TO BUTLER AVENUE  
BUTLER AVENUE FROM SOUTH ANGELL STREET TO WATERMAN STREET  
ANGELL STREET FROM BUTLER AVENUE TO WAYLAND AVENUE  
HOPE STREET FROM LANGHAM ROAD TO SIXTH STREET  
HARTFORD AVENUE FROM LAUREL HILL AVENUE TO OLNEYVILLE SQUARE  
THAYER STREET FROM BROOK STREET TO WATERMAN STREET  
WATERMAN STREET FROM THAYER STREET TO BROOK STREET

THE FOLLOWING SQUARES ARE ALSO CLEANED DAILY:

EAGLE PARK SQUARE	OLNEYVILLE SQUARE
RANDALL SQUARE	TRINITY SQUARE
WAYLAND SQUARE	WASHINGTON SQUARE

A CREW OF MEN WITH HAND BROOMS AND HAND PUSH BARRELS ARE ASSIGNED TO THE DOWNTOWN AREA AND THE OUTLYING SECTIONS OF THE CITY TO KEEP THESE SECTIONS FREE OF DEBRIS.

ALL THE MAIN ARTERIES IN THE CITY WERE CLEANED TWICE A WEEK. ALL THE STREETS IN THE OUTLYING SECTIONS OF THE CITY WERE INSPECTED AND CLEANED BY THE DAY AND NIGHT CLEANING CREWS SUPPLEMENTED BY THE MECHANICAL SWEEPERS. ADDITIONAL HIGHWAY DEPARTMENT CREWS WERE ASSIGNED TO ASSIST IN CLEANING THE OUTLYING SECTIONS DURING THE SPRING AND FALL MONTHS.

172 TRASH CANS WERE EMPTIED FOUR TIMES DAILY. 40 NEW CANS WERE PURCHASED TO REPLACE BROKEN CANS.

NINE MECHANICAL SWEEPERS WERE IN OPERATION, BOTH DAY AND NIGHT, DURING THE YEAR EXCEPT DURING THE WINTER MONTHS. ONE NEW SWEEPER WAS PURCHASED DURING THE FISCAL YEAR.

FIVE DUAL GUTTER BROOM SWEEPERS ARE IN SERVICE AND ARE CAPABLE OF CLEANING GUTTERS FROM EITHER SIDE OF THE SWEEPER, AND ARE ADVANTAGEOUS ON ONE WAY STREETS.

THE FRONT END LOADER WAS USED TO PICK UP THE SWEEPER DUMPS AND LOAD THEM IN TRUCKS FOR DISPOSAL.

AN EMERGENCY CREW WAS ON DUTY TWENTY-FOUR HOURS A DAY TO HANDLE COMPLAINTS FROM THE GENERAL PUBLIC AND TO CORRECT CONDITIONS OUTLINED IN POLICE REPORTS.

A SUMMARY OF OPERATIONS FOR THIS SECTION FOLLOWS:

HAND BROOM SWEEPING	194 MILES
MACHINE BROOM SWEEPING	13,139 MILES
BEAT PATROL	10,051 MILES
HAND BROOM DISPOSAL	3,674 MILES
MACHINE BROOM DISPOSAL	11,937 MILES
STREET CONTAINER DISPOSAL	8,334 MILES

THE EXPENDITURES FOR THIS SECTION WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$339,158.96
ITEM 1 SERVICES OTHER THAN PERSONAL	79,625.05
ITEM 2 MATERIALS AND SUPPLIES	1,897.22
ITEM 5 CAPITAL OUTLAY	1,634.90
TOTAL	\$422,316.13

#### SEWAGE PUMPING STATION

THIS SECTION IS CHARGED WITH THE OPERATION AND MAINTENANCE OF THREE SEWAGE PUMPING STATIONS IN THE CITY. THE MAIN STATION IS LOCATED ON ERNEST STREET AND HANDLES APPROXIMATELY ALL OF THE SEWAGE FLOW. ONE OF THE SMALLER STATIONS IS SITUATED ON RESERVOIR AVENUE NEAR THE CITY LINE AND THE OTHER IN HARBORSIDE PARK, FIELDS POINT.

THE MAIN PUMPING STATION ON ERNEST STREET HAS A CAPACITY OF TWO HUNDRED MILLION GALLONS A DAY. ELECTRIC POWER TO OPERATE THIS STATION IS SUPPLIED FROM THE GARBAGE INCINERATOR POWER PLANT. PROVISION HAS BEEN MADE FOR STAND-BY POWER FROM THE LOCAL POWER COMPANY. THE TWO SMALLER STATIONS OPERATE AUTOMATICALLY AND THE POWER TO OPERATE THEM IS SUPPLIED BY THE LOCAL POWER COMPANY. ALL STATIONS ARE IN OPERATION TWENTY-FOUR HOURS PER DAY.

EXPENDITURES FOR THIS SECTION FOR THE FISCAL YEAR WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$ 62,617.42
ITEM 1 SERVICES OTHER THAN PERSONAL	7,390.26
ITEM 2 MATERIALS AND SUPPLIES	3,428.60
TOTAL	\$73,436.28

TOTAL MONTHLY FLOW, IN MILLION GALLONS, FOR EACH STATION, AS FOLLOWS:

	<u>ERNEST STREET</u> STATION No.1	<u>WASHINGTON PARK</u> * STATION No.2	<u>RESERVOIR AVENUE</u> * STATION No.3	<u>TOTAL</u>
1959				
OCTOBER	1,408.0	14.0	3.0	1,425.0
NOVEMBER	1,300.0	13.0	3.0	1,316.0
DECEMBER	1,488.0	14.0	3.0	1,505.0
1960				
JANUARY	1,281.0	11.0	2.0	1,294.0
FEBRUARY	1,354.0	13.0	4.0	1,371.0
MARCH	1,361.0	13.0	3.0	1,377.0
APRIL	1,416.0	14.0	4.0	1,434.0
MAY	1,366.0	13.0	3.0	1,382.0
JUNE	1,322.0	12.0	2.0	1,336.0
JULY	1,428.0	14.0	3.0	1,445.0
AUGUST	1,631.0	15.0	4.0	1,650.0
SEPTEMBER	1,404.0	13.0	3.0	1,420.0
TOTALS	16,759.0	159.0	37.0	16,955.0

\* ESTIMATED FLOWS

FOLLOWING IS A MONTHLY TABULATION OF THE ELECTRICAL POWER FROM THE GARBAGE INCINERATOR USED AT THE ERNEST STREET STATION:

<u>1959</u>	<u>K.W.H.</u>
OCTOBER	38,022
NOVEMBER	19,822
DECEMBER	96,294
<u>1960</u>	
JANUARY	82,400
FEBRUARY	84,092
MARCH	150,905
APRIL	165,746
MAY	NONE
JUNE	33,684
JULY	2,450
AUGUST	1,376
SEPTEMBER	<u>73,040</u>
TOTAL	747,831

SEWAGE DISPOSAL WORKS

THIS SECTION TREATS AND DISPOSES OF ALL THE SEWAGE FROM THE CITY OF PROVIDENCE, TOWN OF NORTH PROVIDENCE, TOWN OF JOHNSTON, AND WASTES FROM THE NARRAGANSETT BREWING COMPANY, CRANSTON, R.I. THE DISPOSAL PLANT IS LOCATED IN THE SOUTHEASTERLY SECTION OF THE CITY NEAR THE MUNICIPAL DOCK AT FIELDS POINT.

THE FOLLOWING TABLES SHOW THE STATISTICS FOR THE DISPOSAL PLANT FOR THE FISCAL YEAR.

ESTIMATED POPULATION SERVED BY THE PLANT:

PROVIDENCE	248,000
JOHNSTON	2,100
NORTH PROVIDENCE	<u>12,000</u>
TOTAL CONNECTED POPULATION	262,100

<u>SEWAGE FLOW</u>	<u>MILLION GALLONS</u>
PROVIDENCE	13,413.65
JOHNSTON	232.82
NORTH PROVIDENCE	2,811.84
CRANSTON (NARRAGANSETT BREWING CO.)	<u>111.02</u>
TOTAL SEWAGE FLOW	16,569.33

SUMMARY OF OPERATIONS

TOTAL FLOW OF SEWAGE	16,569.33 M.G.
AVERAGE DAILY FLOW	40.05 M.G.
MAX. DAILY FLOW (FEB. 26, 1960)	109.42 M.G.
MIN. DAILY FLOW (JAN. 31, 1960)	12.96 M.G.
TOTAL AIR USED FOR AERATION	8,378.93 MIL. CUB. FT.
LIQUID CHLORINE	743.36 TONS
FERRIC CHLORIDE USED	157.76 TONS
* LIME (AS KEMIKAL HYDRATE)	18.775 TONS
** LIME (AS CHEMLINE SLURRY)	1,048.326 TONS
TOTAL LIME USED	1,067.101 TONS
GRIT REMOVALS	202.72 TONS
SLUDGE INCINERATED	19,121.35 TONS
ASH REMOVED FROM INCINERATOR	4,260.47 TONS
FUEL OIL USED FOR OPERATING SLUDGE INCINERATOR (#5 OIL)	107,681 GALS.
FUEL USED FOR HEATING SLUDGE INCINERATOR BLDG. (#2 OIL)	17,815 GALS.
FUEL USED FOR HEATING BLOWER HOUSE (#2 OIL)	4,295 GALS.
FUEL USED FOR HEATING FILTER BLDG. "	15,537 GALS.
FUEL USED FOR HEATING ADM. BLDG. "	4,215 GALS.
FUEL USED FOR HEATING GRIT BLDG. "	3,659 GALS.
FUEL USED FOR HEATING P.S.S.P.S. "	4,170 GALS.
FUEL USED FOR HEATING S.S. P.S. & CHLORINE BLDG.	<u>3,648.4 GALS.</u>
	53,339.4 TOTAL GALS.

\* USED ONLY IN CASES OF FAILURE OF SLURRY PUMPS AFTER JUNE 1959.

\*\* THE APPLICATION OF LIME AS CHEMLINE SLURRY WAS STARTED IN JUNE 1959.

ELECTRIC POWER USED FROM THE GARBAGE INCINERATOR

1959	K.W.H.
OCTOBER	452,600
NOVEMBER	401,900
DECEMBER	368,500
1960	
JANUARY	313,600
FEBRUARY	263,900
MARCH	175,700
APRIL	196,100
MAY	401,700
JUNE	252,000
JULY	233,500
AUGUST	224,700
SEPTEMBER	320,300
TOTAL	3,604,500

THE EXPENDITURES FOR THE YEAR WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$216,323.43
ITEM 1 SERVICES OTHER THAN PERSONAL	110,503.80
ITEM 2 MATERIALS AND SUPPLIES	137,226.39
ITEM 5 CAPITAL OUTLAY EQUIPMENT	258.64
TOTAL	\$464,312.26

REVENUE FOR THE YEAR WAS AS FOLLOWS: 29,199.72

ALTERATIONS AND IMPROVEMENTS OF THE FACILITIES AT THE SEWAGE DISPOSAL WORKS AS RECOMMENDED BY THE ENGINEERING FIRM OF METCALF & EDDY THROUGH THEIR ASSIGNED REPRESENTATIVE, MR. ARIEL THOMAS, WERE CONTINUED THROUGH THE FISCAL YEAR 1959-1960. INEFFICIENCIES AND INADEQUACIES BROUGHT TO LIGHT DURING THE 1958-1959 STUDIES WERE CORRECTED BY REPLACEMENT OR ADDITIONAL CONSTRUCTION. MAJOR CONTRACTS WERE HANDLED BY THE ARDSLEY CONSTRUCTION COMPANY OF NEW YORK AND THE KOMLINE SANDERSON ENGINEERING CORPORATION OF NEW JERSEY. CHANGES CONSISTED OF BY-PASS CHANNELS BEFORE THE BARMINUTORS, TO RELIEVE THE LOAD ON THE BARMINUTORS DURING PERIODS OF EXCEPTIONALLY HIGH FLOW. THE ALLEN-SHERMAN-HOFF GRIT PUMPS WERE REPLACED BY WAMCO PUMPS OF GREATER CAPACITY AND DISCHARGE. A BOOSTER STATION WAS INSTALLED IN THE OLD PRIMARY PUMP HOUSE TO FURNISH FLUSHING WATER TO THE GRIT BUILDING, PRIMARY SLUDGE PUMPING STATION AND FILTER BUILDING, FOR WASHING AND FLUSHING, IN ORDER TO REDUCE THE VOLUME OF CITY WATER IN USE AT THE DISPOSAL WORKS. THE SLUDGE HOLDING TANKS WERE REPAIRED BY GUNNITING. GREASE SEALS ON THE SECONDARY SLUDGE PUMPS, WHICH HAD PROVED UNSATISFACTORY, WERE REPLACED BY WATER SEALS. STAIRS AND HAND RAILS WERE INSTALLED AT LOCATIONS WHERE HAZARDS TO SAFETY WERE BELIEVED TO EXIST. TWO OF THE EIMCO FILTERS WERE REPLACED BY ONE KOMLINE SANDERSON FILTER OF THE COIL-SPRING TYPE OF SUFFICIENT SIZE TO HANDLE ALL THE SLUDGE PRODUCED AT THE DISPOSAL WORKS.

DURING THE COURSE OF THE YEAR, NEW VIBRO-ISOLATORS WERE INSTALLED ON ROOTS-CONNORSVILLE AIR BLOWERS NOS. 1 AND 2 (OLD BLOWERS) AND THESE BLOWERS WERE RELEVELLED AT THIS TIME. A KNOCK DEVELOPED IN NO. 1 BLOWER AND WHEN INSPECTED BY A ROOTS-CONNORSVILLE ENGINEER IT WAS DISCOVERED THAT IT WOULD REQUIRE CONSIDERABLE WORK ON THE BEARINGS AND SHAFT TO PUT IT BACK IN SERVICE. NO. 2 BLOWER WAS INSPECTED AT THE SAME TIME AND WILL ALSO REQUIRE SOME REPAIRS TO THE BEARINGS.

MODIFICATIONS WERE MADE TO THE CHICAGO BARMINUTORS BY REPLACING THE HYDRAULIC OPERATING SYSTEM BY A SUBMERSIBLE ELECTRICAL SYSTEM. MODIFIED WEARING SHOES WERE ALSO INSTALLED ON THE GUIDE RAILS, AND THE CUTTER DRUMS WERE SENT TO THE FACTORY AND BALANCED.

DUE CREDIT SHOULD BE GIVEN TO THE SEWER MAINTENANCE, HIGHWAY AND BRIDGE DEPARTMENTS FOR THEIR COOPERATION AND HELP IN RESOLVING SOME OF THE PROBLEMS OCCURRING AT THE DISPOSAL WORKS.

ROUTINE COOLING DOWN AND INSPECTION OF THE SLUDGE INCINERATOR OCCURRED SEVERAL TIMES DURING THE YEAR. NEW PLOW BLADES WERE INSTALLED ON HEARTH 4 BY PLANT PERSONNEL AND THE SERVICES OF A WELDER WERE REQUIRED ON TWO OCCASIONS TO STRENGTHEN AND ADJUST THE PLOWS ON SOME OF THE OTHER HEARTHS. DIFFICULTIES ARE STILL BEING ENCOUNTERED WITH THE PLUGGING OF THE DROP HOLES AND BURNING OUT OF THE ASH SCREW MOTOR. FURTHER STUDIES AND CONSULTATIONS ARE IN PROGRESS WITH THE REPRESENTATIVE OF THE NICHOLS ENGINEERING CORPORATION IN THE ENDEAVOR TO CORRECT THESE DEFICIENCIES.

MOST OF THE PLANT PERSONNEL ARE SHOWING AN IMPROVEMENT IN, AND ACCEPTING THEIR RESPONSIBILITY FOR THE CARE, CLEANING, AND ROUTINE MAINTENANCE OF THE EQUIPMENT ASSIGNED TO THEM.

DAMAGES SUFFERED AT THE DISPOSAL WORKS AS A RESULT OF HURRICANE DONNA WERE COMPARATIVELY LIGHT.

## RECOMMENDATIONS

FURTHER STUDY SHOULD BE MADE TO CORRECT THE DEFICIENCIES THAT STILL EXIST IN THE OPERATION OF THE BARMINUTORS.

THE INCINERATOR STACK SHOULD RECEIVE A COAT OF PAINT AS SOON AS POSSIBLE.

IMMEDIATE CONSIDERATION SHOULD BE GIVEN TO THE INSTALLATION OF A WARNING SYSTEM FOR THE DETECTION OF RADIO ACTIVE ISOTOPES TO BE INSTALLED AT SUCH A POINT IN THE SEWAGE SYSTEM THAT AMPLE TIME WILL BE AVAILABLE FOR PROTECTING PLANT PERSONNEL FROM RADIOACTIVITY.

EJECTOR SUMP PUMPS SHOULD BE REPLACED WITH PUMPS THAT WILL PROPERLY PERFORM THE FUNCTIONS FOR WHICH THEY WERE INTENDED.

RECOMMENDATIONS ARE STILL BEING CONSIDERED BY THE ENGINEERS ON FURTHER IMPROVEMENTS AND CHANGES.

## REFUSE COLLECTION AND DISPOSAL

THE REFUSE COLLECTION AND DISPOSAL SECTION IS RESPONSIBLE FOR THE COLLECTION AND DISPOSAL OF ALL NON-COMBUSTIBLE REFUSE FROM THE RESIDENTIAL SECTIONS OF THE CITY ONCE A MONTH. THE CITY IS DIVIDED INTO FOUR AREAS AND EACH AREA IS SUB-DIVIDED INTO TWENTY ROUTES.

A DRIVER AND TWO LABORERS ARE ASSIGNED TO EACH TRUCK. ALL MATERIAL COLLECTED IS DUMPED IN A CONTROLLED DUMP ON MANTON AVENUE. A BULLDOZER IS ASSIGNED TO THE DUMP TO MAINTAIN LEVEL FILLING AND A DUMP ATTENDANT PREVENTS THE DUMPING OF COMBUSTIBLE RUBBISH, THUS PREVENTING FIRES.

EIGHT TRUCKS, 8 - 16 CU.YD. LOADPACKERS ARE USED FOR THE COLLECTIONS. THESE TRUCKS ARE RENTED FROM THE SANITATION SHOP AND STORES ON TERMINAL ROAD.

THIS SECTION ALSO COLLECTED NON-COMBUSTIBLE REFUSE FROM FIRE AND POLICE STATIONS, CITY BUILDINGS AND PUBLIC LIBRARIES.

THE TOTAL CUBIC YARDS COLLECTED FROM EACH AREA PER MONTH WAS AS FOLLOWS:

	<u>AREA I</u>	<u>AREA II</u>	<u>AREA III</u>	<u>AREA IV</u>	<u>TOTAL</u>
<u>1959</u>					
OCTOBER	896	1600	1184	1056	4736
NOVEMBER	976	1568	1248	1088	4880
DECEMBER	864	1392	1152	1184	4592
<u>1960</u>					
JANUARY	944	1360	1136	1104	4544
FEBRUARY	949	1323	1136	1056	4464
MARCH	768	1221	880	1035	3904
APRIL	992	1520	1232	1216	4960
MAY	848	1440	1040	1120	4448
JUNE	880	1456	1104	1104	4544
JULY	960	1524	1068	1008	4560
AUGUST	832	1344	1024	1056	4256
SEPTEMBER	<u>816</u>	<u>1408</u>	<u>976</u>	<u>880</u>	<u>4080</u>
TOTALS	10725	17156	13180	12907	53968

EXPENDITURES FOR THIS SECTION FOR THE FISCAL YEAR WERE AS FOLLOWS:

ITEM 0 PERSONAL SERVICES	\$105,428.74
ITEM 1 SERVICES OTHER THAN PERSONAL	38,785.50
ITEM 2 MATERIALS AND SUPPLIES	<u>                    </u>
TOTAL	\$144,214.24

## GARBAGE COLLECTION AND DISPOSAL

THIS SECTION IS CHARGED WITH THE COLLECTION AND DISPOSAL OF DOMESTIC GARBAGE AND COMBUSTIBLE RUBBISH, THE DISPOSAL OF COMMERCIAL RUBBISH AND THE GENERATION OF ELECTRIC POWER. THE POWER GENERATED IS USED AT THE INCINERATOR, THE MAIN SEWAGE PUMPING STATION, SEWAGE DISPOSAL WORKS, SANITATION GARAGE AND MUNICIPAL GARAGE.

A FLEET OF TWENTY-TWO TRUCKS, WITH SPECIAL ENCLOSED BODIES, IS USED IN MAKING THE COLLECTION OF DOMESTIC GARBAGE AND COMBUSTIBLE HOUSEHOLD RUBBISH. COLLECTIONS ARE MADE TWICE WEEKLY FROM ALL RESIDENCES IN THE CITY.

THE MATERIAL COLLECTED IS DISPOSED OF IN AN INCINERATOR AT FIELDS POINT. THERE ARE TWO 160 TON PER DAY INCINERATING UNITS, EACH WITH TWO WASTE HEAT BOILERS FOR STEAM GENERATION AND THE STEAM PRODUCED IS USED TO DRIVE THE WESTINGHOUSE TURBO-GENERATORS, RUN AUXILIARY MACHINERY, HEAT THE INCINERATOR PLANT, SANITATION GARAGE, REPAIR SHOP AND THE SEWAGE DISPOSAL PLANT.

THERE ARE TWO GENERATORS IN THE PLANT, EACH WITH A CAPACITY OF 1250 K.W. BOTH THE INCINERATOR AND THE POWER PLANT ARE IN OPERATION TWENTY-FOUR HOURS PER DAY.

ALL THE AUTOMOTIVE EQUIPMENT USED BY THIS SECTION IS RENTED FROM THE SANITATION SHOPS & STORES REVOLVING FUND.

THE EXPENDITURES FOR THIS SECTION FOR THE FISCAL YEAR WERE AS FOLLOWS:

ITEM 0	PERSONAL SERVICES	\$572,108.74
ITEM 1	SERVICES OTHER THAN PERSONAL	180,727.46
ITEM 2	MATERIALS AND SUPPLIES	10,692.29
ITEM 3	INSURANCE	<u>4,407.34</u>
		\$767,935.83

DURING THE FISCAL YEAR 30,000 GALLONS OF NO.6 FUEL OIL WERE USED TO MAINTAIN THE STEAM PRESSURE IN TIMES OF EMERGENCY OR MECHANICAL BREAKDOWN. 10,000 GALLONS OF THE ABOVE AMOUNT WAS PURCHASED BECAUSE OF LACK OF GARBAGE AND REFUSE DUE TO SNOW STORMS.

THE FOLLOWING IS THE K.W.H. FURNISHED THE SEWAGE DISPOSAL WORKS, THE MUNICIPAL GARAGE, THE SEWAGE PUMPING STATION AND STATION POWER.

<u>1959</u>	<u>SEWAGE DISPOSAL</u>	<u>SEWAGE PUMPING</u>	<u>MUNICIPAL GARAGE</u>	<u>STATION POWER</u>	<u>TOTAL</u>
OCTOBER	452,600	38,022	1,078	89,300	582,078
NOVEMBER	401,900	19,822	1,078	92,200	516,078
DECEMBER	368,500	96,294	1,306	91,900	559,306
<u>1960</u>					
JANUARY	313,600	82,400	1,300	92,700	491,300
FEBRUARY	263,900	84,092	1,208	82,000	432,408
MARCH	175,700	150,905	1,195	91,200	420,195
APRIL	196,100	165,746	1,054	88,100	452,054
MAY	401,700	000	1,041	85,300	488,041
JUNE	252,000	33,684	1,016	81,300	369,016
JULY	233,500	2,450	1,050	83,000	321,050
AUGUST	224,700	1,376	824	85,000	312,724
SEPTEMBER	<u>320,300</u>	<u>73,040</u>	<u>1,060</u>	<u>79,600</u>	<u>475,060</u>
TOTAL	3,604,500	747,831	13,210	1,041,600	5,419,310

THE FOLLOWING IS THE TOTAL AMOUNT OF GARBAGE AND RUBBISH DISPOSED OF BY THIS DEPARTMENT, FROM OCTOBER 1959 TO SEPTEMBER 1960:

<u>1959</u>	<u>GARBAGE (TONS)</u>	<u>RUBBISH (TONS)</u>
OCTOBER	3,080.30	2,278.00
NOVEMBER	2,834.70	2,577.90
DECEMBER	2,810.35	2,713.00
<u>1960</u>		
JANUARY	2,838.30	2,234.30
FEBRUARY	2,744.20	2,236.50
MARCH	2,952.65	2,358.50
APRIL	3,013.45	2,445.30
MAY	3,083.85	2,548.00
JUNE	3,045.40	2,139.00
JULY	3,635.10	2,421.00
AUGUST	2,817.00	2,470.00
SEPTEMBER	<u>3,585.00</u>	<u>2,172.50</u>
TOTAL	36,440.30	28,594.00

DAILY AVERAGE FOR COLLECTION BASED ON 314 WORKING DAYS 116.0 TONS  
 DAILY AVERAGE FOR DISPOSAL BASED ON 365 WORKING DAYS 178.1 TONS

<u>TOTAL POWER GENERATED</u>	<u>K.W.H.</u>
AVERAGE DAILY DISTRIBUTED LOAD	11,993
AVERAGE DAILY DISTRIBUTED LOAD TO SEWAGE DISPOSAL WORKS	9,875
AVERAGE DAILY DISTRIBUTED LOAD TO SEWAGE PUMPING STATION	2,082
AVERAGE DAILY DISTRIBUTED LOAD TO MUNICIPAL GARAGE	36
AVERAGE DAILY DISTRIBUTED LOAD TO GARBAGE INCINERATOR	2,853

THE MONTHLY ASH TOTALS FROM THE INCINERATOR DURING THE YEAR WERE AS FOLLOWS:

<u>1959</u>	<u>TONS</u>
OCTOBER	923.00
NOVEMBER	860.00
DECEMBER	941.00
<u>1960</u>	
JANUARY	932.00
FEBRUARY	900.00
MARCH	1,005.00
APRIL	950.00
MAY	930.00

JUNE	910.00
JULY	910.00
AUGUST	965.00
SEPTEMBER	870.00
TOTAL	<u>11,096.00</u>

THE FOLLOWING IS A SUMMARY OF THE REPAIR WORK PERFORMED IN THE COURSE OF THE FISCAL YEAR TO INCINERATOR PLANTS NOS. 1 AND 2.

THE ASH CONVEYOR IN PLANT NO. 1 IS IN OPERATION 24 HRS. A DAY - 7 DAYS A WEEK. DUE TO THIS HARD SERVICE IT WAS NECESSARY TO REPLACE 180 FT. OF CONVEYOR CHAIN AND CONVEYOR BEARINGS DURING THE COURSE OF THE FISCAL YEAR.

THE FORCED DRAFT MACHINE WAS REPAIRED AND NEW COUPLINGS WERE INSTALLED.

THE SPEED CHANGE CONTROL MOTOR WAS TAKEN APART AND REPAIRED ON TURBINE NO. 2. THE OVERHAUL JOB ON TURBINE NO. 2 WAS COMPLETED AND THE TURBINE WAS PUT BACK ON THE LINE. BOTH TURBINES ARE NOW IN EXCELLENT RUNNING ORDER. THE WORK ON THE TURBINES WAS UNDER THE SUPERVISION OF A WESTINGHOUSE ENGINEER WHO WAS ASSISTED BY INCINERATOR EMPLOYEES.

LEAKS DEVELOPED IN THE WATER JACKET OF INCINERATOR NO. 1 TWICE DURING THE YEAR WHICH REQUIRED A WELDING JOB.

BOTH THE GOVERNORS ON THE WATER PUMPS WERE REPAIRED AND NEW PARTS INSTALLED WHERE NEEDED. THIS REPAIR WORK WAS REQUIRED IN BOTH PLANTS.

THE BOILER GATES IN BOTH PLANTS WERE RE-BUILT. NEW STEEL WORK WAS REPLACED WHERE NEEDED.

ONE CIRCULATING WATER PUMP WAS OVERHAULED AND PUT BACK IN SERVICE.

LEAKS DEVELOPED IN THE CONDENSER TUBES OF CONDENSER NO. 2 AND IT WAS NECESSARY TO REPLACE TWELVE OF THEM WITH NEW TUBES.

TWO WATER TUBES IN BOILER NO. 4 WERE IN POOR CONDITION. THESE TUBES WERE REMOVED AND REPLACED WITH NEW ONES.

ALL THE BRISTON LEATHER CUPS ON THE CHARGING DOORS WERE RENEWED DURING THE COURSE OF THE YEAR.

TWO GEARS ON THE ELECTRIC CRANE IN PLANT NO. 1 WERE BADLY WORN. NEW GEARS WERE PURCHASED, BORED AND MACHINED AND THE REPAIRS MADE AND THE CRANE WAS PUT BACK INTO SERVICE.

THE HIGH AND LOW ALARMS IN WATER COLUMNS NO. 3 AND NOV. 4 WERE FAULTY. THE ALARMS WERE TAKEN OUT AND REPLACED BY NEW ONES.

FOUR ARMSTRONG STEAM TRAPS WERE OVERHAULED AND THE WORN PARTS WERE REPLACED WHERE NEEDED.

THREE REPAIR CLAMPS WERE PUT ON THE WATER LINE TO THE TURBINE IN PLACES WHERE THE PIPE WAS FAULTY.

THE CHARGING DOORS IN PLANT NO. 2 WERE REPAIRED AND TEN NEW BEARINGS WERE USED DURING THE COURSE OF THIS WORK.

THE GARBAGE GRAB BUCKET IN BOTH PLANTS WAS REPAIRED DURING THE YEAR. WORN BOLTS AND NUTS WERE REPLACED WITH NEW ONES WHERE NEEDED.

#### RECOMMENDATIONS

THE BRICK WORK IN THE FURNACE AND COMBUSTION CHAMBER IN PLANT NO. 1 IS IN VERY POOR CONDITION AND IT IS SUGGESTED THAT THIS WORK BE TAKEN CARE OF IN THE NEAR FUTURE.

THE BRICK AND STEEL WORK OF THE ASH HOPPER AT THE END OF THE TRAVELING GRATE IN PLANT NO. 1 SHOULD BE RENEWED.

THE ASH CONVEYOR IN PLANT NO. 1 IS IN NEED OF REPAIR. SIX HUNDRED-FIFTY FEET OF CONVEYOR CHAIN AND FIFTEEN LENGTHS OF CARBON STEEL BAR 3" X 1/2" WOULD BE REQUIRED FOR THIS WORK.

IT IS RECOMMENDED THAT TWO NEW GARBAGE GRAB BUCKETS BE PURCHASED. THE BUCKET IN PLANT NO. 1 IS APPROXIMATELY TWENTY YEARS OLD AND THE BUCKET IN PLANT NO. 2 IS TWELVE YEARS OLD.

THE FLASHING AROUND THE BRICK STACK IN PLANT NO. 2 IS IN VERY POOR CONDITION AND NEW MATERIAL SHOULD BE INSTALLED TO REMEDY THIS CONDITION.

THE ELECTRIC CRANE IN PLANT NO. 1 HAS BEEN IN SERVICE TWENTY THREE YEARS. IT IS RECOMMENDED THAT AN OVERHAUL JOB BE DONE ON THIS CRANE. AN ENGINEER FROM THE HARNISCHFEGGER CORPORATION SHOULD SUPERVISE THIS WORK WHICH COULD BE DONE BY THE EMPLOYEES OF THIS DEPARTMENT.

A LARGE NUMBER OF THE PRE-HEATER TUBES IN BOILERS #3 AND #4 ARE IN BAD CONDITION AND SHOULD BE REPLACED WITH NEW TUBES.

THE OVERHEAD DOORS IN FRONT OF THE GARBAGE PITS ARE IN NEED OF AN OVERHAUL JOB.

IN SOME CITIES A CHARGE IS MADE FOR THE LARGE NUMBER OF COMMERCIAL TRUCKS USING THE FACILITIES OF THE INCINERATOR FOR DISPOSAL OF THEIR REFUSE. THE REVENUE DERIVED FROM SUCH COULD BE USED TO ADVANTAGE FOR REPAIRS TO THIS PLANT.

IT IS SUGGESTED THAT A NUMBER OF CONDENSER TUBES BE PURCHASED FOR REPLACEMENT OF DEFECTIVE ONES IN BOTH CONDENSERS. THE WORK OF INSTALLATION COULD BE DONE BY INCINERATOR EMPLOYEES.

AN INCREASED GARBAGE PIT STORAGE AREA COULD BE USED TO ADVANTAGE BY THIS PLANT. DURING SNOW STORMS, WHEN THE GARBAGE COLLECTION TRUCKS ARE USED FOR PLOWING, A SHORTAGE OF GARBAGE AND REFUSE, RESULTS AND IT IS NECESSARY TO BURN FUEL OIL FOR POWER GENERATION AND OPERATION.

#### SANITATION SHOPS AND STORES

THE SHOPS AND STORES IS RESPONSIBLE FOR THE SERVICING AND MAINTENANCE OF ALL AUTOMOTIVE EQUIPMENT IN THE DIVISION, WITH THE EXCEPTION OF THE STREET CLEANING SECTION.

THE EQUIPMENT IS RENTED OUT ON AN HOURLY RATE TO EACH SECTION. THE RENTAL PAYMENTS ARE MADE TO THE SANITATION REVOLVING FUND AND THIS FUND IS USED TO DEFRAY THE OPERATING EXPENSES OF THE SHOPS AND STORES AND TO PURCHASE NEW EQUIPMENT AS NEEDED.

A LIST OF THE AVAILABLE RENTAL EQUIPMENT IN THE SHOPS AND STORES, IS AS FOLLOWS:

- 24 GARBAGE COLLECTION TRUCKS WITH GAR-WOOD LOADPACKER TYPE BODIES.
- 8 REFUSE COLLECTION TRUCKS WITH LOADPACKER TYPE BODIES.
- 2 DUMP BODY TRUCKS.
- 2 PICKUP TRUCKS 1/2 TON CAPACITY.
- 6 PASSENGER CARS.
- 1 BULLDOZER.
- 1 SMALL AIR COMPRESSOR.

THE GARAGE AND REPAIR SHOP, AT 100 TERMINAL ROAD, IN THE FIELDS POINT SECTION OF THE CITY, CONSISTS OF TWO SECTIONS. ONE SECTION TWO HUNDRED FEET LONG AND ONE HUNDRED FEET WIDE IS USED FOR STORAGE OF EQUIPMENT. THE OTHER SECTION, ONE HUNDRED FEET LONG AND ONE HUNDRED FEET WIDE IS USED FOR REPAIR WORK AND STORAGE WHEN NECESSARY. THE REPAIR SHOP HAS ALL MODERN EQUIPMENT TO CARRY ON THE WORK. A MACHINE SHOP IS PART OF THE REPAIR SHOP AND IT IS POSSIBLE FOR THE SECTION TO MAKE NEW PARTS OR REPAIR BROKEN ONES FOR ANY OTHER SECTION OF THE SANITATION DIVISION. THIS HAS SAVED BOTH TIME AND EXPENSE DURING THE PAST YEAR. HEAT AND POWER FOR THE ENTIRE BUILDING IS FURNISHED BY THE GARBAGE INCINERATOR CLOSE BY.

#### SANITATION DIVISION REVENUE

THE REVENUE FOR THIS DIVISION DURING THE FISCAL YEAR WAS AS FOLLOWS:

SEWAGE PUMPING STATION	\$	33.12
SEWAGE DISPOSAL SECTION		29,199.72
GARBAGE COLLECTION AND DISPOSAL SECTION		342.26
REFUSE COLLECTION AND DISPOSAL SECTION		670.00
TOTAL		<u>\$30,245.10</u>

RESPECTFULLY SUBMITTED,

HOWARD F. CARPENTER  
CHIEF OF SANITATION DIVISION.

HARBOR DIVISION

MR. CHARLES F. MCELROY,  
DIRECTOR OF PUBLIC WORKS,  
CITY HALL, PROV. R.I.

DEAR SIR:

FOLLOWING IS THE ANNUAL REPORT COVERING ACTIVITIES OF THE HARBOR DIVISION FOR THE YEAR ENDING SEPTEMBER 30, 1960.

MUNICIPAL DOCK

DURING THE YEAR WE LEASED THE ENTIRE NUMBER ONE TRANSIT SHED TO THE ABBOTT GLASS CO. THE ABBOTT GLASS CO. IS A LOCAL CONCERN THAT HAD OUTGROWN THEIR ORIGINAL FACILITIES. INASMUCH AS THEY IMPORT ALL THEIR GLASS THEY WERE CONSIDERING MOVING TO BOSTON TO BE LOCATED ON OR NEAR THE WATERFRONT. IN VIEW OF THIS, WE FELT THE RENTING OF THE SHED TO THIS PRIVATE CONCERN WOULD KEEP AN INDUSTRY IN PROVIDENCE AND IMPROVE OUR CHANCES OF OBTAINING SHIPPING SERVICES THAT WOULD NOT ONLY BENEFIT THE GLASS CO., BUT ALSO BENEFIT OTHER RECEIVERS AND SHIPPERS OF CARGO IN THIS AREA, WHO COULD NOT OF THEIR OWN RECEIVE DIRECT WATER SHIPMENT DUE TO SMALL TONNAGE MOVEMENTS.

OUR OTHER CARGO MOVEMENTS HELD STEADY. WE CONSIDER THIS FAVORABLE IN VIEW OF THE DECLINE IN SHIPPING INDUSTRY OVER THE PAST FOUR MONTHS.

CARGO HANDLED

THE FOLLOWING CARGO ARRIVED AT THE CITY OF PROVIDENCE MUNICIPAL DOCK DURING THE PERIOD FROM OCTOBER 1, 1959 TO SEPTEMBER 30, 1960:

LUMBER 50,759,366 B FT.	94,750 TONS
NAILS	3,279 "
CEMENT	28,230 "
GLASS	1,245 "
PIG IRON	4,505 "
GASOLINE	307,296 "
FUEL OIL	196,341 "
KEROSENE	28,064 "
LUBE OIL	10,348 "
STEEL RODS	1,455 "
	<u>675,513 "</u>

THE FOLLOWING CARGO WAS SHIPPED FROM THE CITY OF PROVIDENCE MUNICIPAL DOCK DURING THE PERIOD FROM OCTOBER 1, 1959 TO SEPTEMBER 30, 1960:

GASOLINE	28,113 TONS
FUEL OIL	10,202 "
KEROSENE	2,623 "
COTTON THREAD	433 "
SCRAP	<u>6,332 "</u>
	47,703 "

CARGO RECEIVED	675,513 TONS
CARGO SHIPPED	<u>47,703 "</u>
TOTAL	723,216 "

REVENUE

LEASE OF STORAGE WAREHOUSE	\$44,358.00
LEASE OF LAND	58,521.25
WHARFAGE	78,497.39
TRACKAGE	7,404.00
WATER	5,246.29
DOCKAGE	16,558.15
STORAGE	19,584.14
MISCELLANEOUS	<u>6,919.74</u>
	\$237,088.96

EXPENDITURES

ITEM 0 PERSONAL SERVICES	\$ 32,065.30
ITEM 1 SERVICES OTHER THAN PERSONAL	24,579.81
ITEM 2 MATERIALS AND SUPPLIES	<u>1,966.23</u>
TOTAL	\$ 58,611.34

CARGO HANDLED

RECEIVED

MONTH	GAS	KERO.	COAL	L.O.	DIES.	ASPH.	FUEL OILS	CEM.	CHEM.	LUMBER	G.C.	PIG IRON	SULP.	NAPT.	SCRAP
OCT.	128,674	3,757	47,068	3,183	1,359	1,519	214,474	-	-	-	-	-	1,473	-	-
NOV.	171,259	43,756	75,000	4,245	-	-	336,465	2,961	-	-	211	-	-	-	-
DEC.	148,076	37,472	33,193	6,406	5,357	9,639	388,311	-	-	-	-	-	-	-	-
JAN.	157,139	44,386	49,388	3,638	9,049	1,500	413,011	-	-	-	348	-	-	-	-
FEB.	163,438	41,956	48,674	4,706	-	-	362,636	-	-	5,980	580	-	-	-	-
MAR.	131,878	20,996	51,000	8,669	2,061	1,600	309,030	-	9,500	10,530	566	-	-	-	-
APR.	158,487	21,490	27,619	1,599	6,833	1,500	323,915	5,779	-	5,361	957	2,100	-	2,977	-
MAY	157,626	17,344	92,667	-	4,786	-	527,430	1,579	-	12,704	-	-	-	-	-
JUNE	121,150	14,826	43,857	9,100	4,577	-	243,898	-	-	19,595	723	-	-	3,900	-
JULY	200,279	31,103	59,864	7,526	15,487	7,980	244,691	3,355	-	3,493	1,299	-	-	-	-
AUG.	145,999	3,505	73,668	3,038	4,382	16,187	302,760	6,529	-	1,108	1,732	-	-	-	-
SEPT.	189,979	22,899	23,382	6,864	4,093	310	192,588	-	-	729	2,189	-	-	3,124	-
TOTALS:	1,873,984	303,490	652,460	58,974	57,984	40,235	3,859,209	25,203	9,500	59,580	8,645	2,100	1,473	9,971	-

SHIPPED

OCT.	19,945	3,608	3,582	-	-	2,145	11,762	-	-	-	-	-	-	-	-
NOV.	22,744	2,346	5,641	-	1,816	2,833	20,205	-	-	-	-	-	-	446	1,853
DEC.	26,994	3,742	3,360	-	173	-	42,008	-	-	-	-	-	1,344	-	13,662
JAN.	26,508	6,227	3,628	-	1,131	-	30,283	-	-	-	-	-	-	-	5,000
FEB.	22,878	4,762	3,000	-	-	-	18,752	-	-	-	-	-	-	-	-
MAR.	28,670	3,549	3,000	-	165	-	55,729	-	-	-	-	-	-	525	5,000
APR.	29,005	2,619	3,000	-	525	9,494	27,802	-	-	-	-	-	-	507	23,291
MAY	24,706	1,407	3,000	-	1,419	10,633	15,553	-	-	-	-	-	-	501	9,075
JUNE	19,549	233	-	-	897	8,823	10,490	-	-	-	-	-	-	-	8,732
JULY	29,545	2,968	2,520	-	1,802	8,166	15,506	-	-	-	-	-	-	-	-
AUG.	28,222	1,797	3,000	-	-	22,333	9,764	-	-	-	-	-	-	-	-
SEPT.	16,618	1,432	-	-	1,958	18,000	10,435	-	-	-	-	-	-	-	10,015
TOTALS:	295,484	34,590	30,731	-	9,686	82,427	272,389	-	-	6,962,008	-	-	1,344	1,979	76,628
							TOTAL RECEIVED	-	-	6,962,008	-	-	-	-	-
							TOTAL SHIPPED	-	-	895,156	-	-	-	-	-
							TOTAL	-	-	7,767,964	-	-	-	-	-

THE FOLLOWING VESSELS ARRIVED IN THE HARBOR:

STEAMSHIPS	566
COASTWISE TANKERS	420
BARGES	<u>159</u>
TOTAL	1,145

EXPENDITURES

ITEM 0 PERSONAL SERVICES	\$4,004.81
ITEM 1 SERVICES OTHER THAN PERSONAL	113.80
ITEM 2 MATERIALS AND SUPPLIES	<u>16.20</u>
TOTAL	\$4,134.81

RESPECTFULLY SUBMITTED

JAMES J. FISHER  
PORT AGENT.

PUBLIC SERVICE ENGINEER

MR. CHARLES F. McELROY,  
DIRECTOR OF PUBLIC WORKS,  
CITY HALL,  
PROVIDENCE, RHODE ISLAND.

DEAR SIR:

I RESPECTFULLY SUBMIT THE FOLLOWING REPORT FOR THE PUBLIC SERVICE ENGINEER FOR THE FISCAL YEAR 1959-1960:

STREET LIGHTING UNIT COSTS

UNDER THE PROVISIONS OF SECTION 17 OF THE EXISTING CONTRACT FOR STREET LIGHTS - THIS BEING THE SO-CALLED "FUEL CLAUSE", THE COST OF THE STREET LIGHTS FOR THE YEAR BEGINNING OCTOBER 1, 1959, DEPENDED UPON THE COST OF FUEL FOR THE YEAR ENDING JULY 31, 1960. THIS COST AVERAGED \$10.63, AND RESULTED IN A DECREASE IN COST OVER THAT OF THE PREVIOUS YEAR. A TABULATION SHOWING THE UNIT PRICES FOR THE YEAR BEGINNING OCTOBER 1, 1960, IS AS FOLLOWS:

	ANNUAL INCREASE PER 10¢		DECREASE OVER BASE	BASE PRICE	NEW PRICE
	INCREASE IN COST OF FUEL ABOVE \$10.75 BASE	NO. OF 10¢ BELOW \$10.75 BASE FUEL PRICE	PRICE	PRICE	PRICE
<u>INCANDESCENT 100 CP.</u>					
U.G. ALL NIGHT	.021	9	.19	29.12	28.93
U.G. SINGLE, 1/2 NIGHT	.009	9	.08	25.11	25.03
AERIAL SINGLE, A.N.	.021	9	.19	16.09	15.90
AERIAL SINGLE, 1/2 NIGHT	.009	9	.08	10.40	10.32
<u>MISCELLANEOUS</u>					
250 C.P. U.G. A.N.	.043	9	.39	52.19	51.80
250 C.P. AERIAL, A.N.	.043	9	.39	32.19	31.80
1000 C.P. AERIAL, A.N.	.132	9	1.19	72.51	71.32
1000 C.P. U.G. A.N.	.132	9	1.19	92.51	91.32
1000 C.P. U.G. 1/2 NIGHT	.066	9	.59	72.39	71.72
250 C.P. U.G. 1/2 NIGHT	.022	9	.20	43.74	43.52
10,000 LUMEN SODIUM, U.G.	.049	9	.44	87.22	86.78
10,000 LUMEN SODIUM, O.H.	.049	9	.44	67.22	66.78
600 C.P. INCANDESCENT, O.H.	.088	9	.79	53.57	52.78
600 C.P. INCANDESCENT, U.G.	.088	9	.79	73.57	72.78
15,000 LUMEN MERCURY, O.H.	.097	9	.87	71.95	71.08
15,000 LUMEN MERCURY, U.G.	.097	9	.87	91.95	91.08
15,000 LUMEN MERCURY, U.G. 2 LT	.194	9	1.75	165.90	164.15
15,000 LUMEN MERCURY UNDERPASSES 24HR.	.47	9	2.54	123.16	120.62
21,000 LUMEN O.H.	--	-	----	100.00	100.00
25,000 LUMEN U.G.	--	-	----	120.00	120.00
6,800 LUMEN O.H. MERC.	--	-	----	55.00	55.00
6,800 LUMEN U.G. MERC.	--	-	----	75.00	75.00

NARRAGANSETT ELECTRIC COMPANY FUEL COSTS

THE RATES WHICH ARE AFFECTED BY FUEL COSTS ARE:

GENERAL SERVICE RATE D . . . . .	\$5.00
POWER RATE F . . . . .	5.10
POWER RATE G . . . . .	5.50
LIMITED SERVICE RATE H-3 ABOVE..	5.00

EACH OF THESE RATES IS AFFECTED ONLY WHEN THE COST OF FUEL EQUALS OR EXCEEDS THE ABOVE AMOUNTS PER GROSS TON, A CONDITION WHICH EXISTED THROUGHOUT THE YEAR WITH THE PRESENT BASIS COST.

THE COST OF FUEL BY MONTH WAS AS FOLLOWS:

1959	OCTOBER . . . . .	\$11.67
	NOVEMBER . . . . .	11.70
	DECEMBER . . . . .	11.65

1960	JANUARY . . . . .	\$11.68
	FEBRUARY . . . . .	11.65
	MARCH . . . . .	9.74*
	APRIL . . . . .	9.90
	MAY . . . . .	9.83
	JUNE . . . . .	9.91
	JULY . . . . .	9.93
	AUGUST . . . . .	9.92
	SEPTEMBER . . . . .	9.94

THE ABOVE FIGURES SHOW THAT THE  
AVERAGE PRICE PER TON FOR THE YEAR  
WAS \$10.63 PER TON -

\*TO STANDARD NET TON.

THE NUMBER OF LAMPS AND GLOBES REPORTED AS BROKEN ON STREET LIGHTS DURING THE  
YEARS OF 1958-1959-1960 - IS AS FOLLOWS:

	<u>INCANDESCENT</u>	<u>LIGHTS BROKEN</u>	<u>MERC. GLOBES</u>
1958 - 1959	20	3401	98
1959 - 1960	9	3981	78

SCHEDULES OF STREET LIGHTING DATA

	<u>O.H. A.N.</u>		<u>1000 CP.</u>			
	<u>600 CP.</u>		<u>U.G. A.N.</u>	<u>U.G. H.N.</u>	<u>O. H.</u>	<u>A.N.</u>
OCT. 1, 1959	29		318	3		27
SEPT. 30, 1960	29		316	3		26
CHANGES	0		2	0		1

	<u>MERC. 6800 LU.</u>		<u>MERC. 2 LT. AN UG</u>		<u>MERC. VAP. OH</u>		<u>MERC. A.N. U.G</u>		<u>SODIUM LIGHTS UG AN</u>	
OCT. 1, 1959	7		6		2102		1444			22
SEP. 30, 1960	42		8		2112		1503			22
CHANGES	35		2		10		59			0

	<u>100 CP.</u>		<u>U.G.</u>		<u>100 CP.</u>		<u>O.H.</u>		<u>MERC. VAP.</u>		<u>A.N. O.H. U.G.</u>	
	<u>A.N.</u>	<u>U.G.</u>	<u>H.N.</u>		<u>A.N.</u>	<u>H.N.</u>	<u>24 HR.</u>	<u>U.G.</u>	<u>250 CP.</u>			
OCT. 1, 1959	150	227			7850-B	9		44		485		15
SEPT. 30, 1960	145	227			7863	9		44		492		15
CHANGES	5	0			13	0		0		7		0

SEPT. 30, 1959 SEPT. 30, 1960 CHANGES

TOTAL NUMBER EQUIVALENT SINGLE INCANDESCENT LIGHTS	9125	9137	12
TOTAL NUMBER MERCURY LIGHTS 15,000 LUMEN AND 7,000 LUMEN	3593	3665	72
TOTAL NUMBER EQUIVALENT SINGLE SODIUM LIGHTS	22	22	0

FROM MAY 1 TO OCTOBER 14, INCLUSIVE, THE H.N. LIGHTS BURN ONE EXTRA HOUR UNTIL 1 A.M.

THE UNITED TRANSIT COMPANY IS CHARGED FOR 1/2 THE COST OF THE 15,000 LUMEN U.G. MERCURY WHICH IS LOCATED AT THE THAYER STREET ENTRANCE TO THE TUNNEL.

B - INCLUDES 8 LIGHTS ON MONTGOMERY AVENUE FOR WHICH CRANSTON PAYS \$7.00 PER LIGHT PER ANNUM.

NARRAGANSETT ELECTRIC COMPANY

1.	(A)	TOTAL NUMBER OF WOOD POLES IN CITY (INCLUDING THOSE JOINTLY OWNED, BUT NOT INCLUDING THOSE JOINTLY USED, WITH NO OWNERSHIP.)	18,983
	(B)	TOTAL NUMBER JOINTLY OWNED POLES WITH N.E.T. & T.CO.	13,845
	"	" " " " " " U.E.R. CO.	0
	"	" " " " " " WES. UN. TEL. CO.	0
	"	" " " " " " POS. TEL. CO.	0
	"	" " " " " " N.E.T. & U.E.R. ( 3 PARTY)	0
	"	" " " " " " U.E.R. & WES. UN. TEL. CO.	0
	"	" " " " " " N.E.T. & WES. UN. TEL. CO.	0
2.		TOTAL NUMBER IRON POLES IN CITY.	252
		NUMBER OF UNDERGROUND STREET LIGHT STANDARDS	
	"	" ORNAMENTAL ARC.	0
	"	" ORNAMENTAL INCANDESCENTS (MERCURY VAPOR)	2,245
	"	" GOOSE NECKS	0
	"	" ORNAMENTAL INC. WITH U.E.R.	0
	"	" IRON POLES WITH U.E.R.	0
	"	" IRON POLES WITH U.E.R. & N.E.T. & T. CO.	0
	"	" IRON POLES WITH N.E.T. & T. CO.	9

3.	TOTAL NUMBER MILES CONDUIT (TRENCH FEET) IN CITY.	83.22
4.	TOTAL NUMBER MILES CONDUIT (DUCT FEET) IN CITY.	689.21
5.	TOTAL NUMBER UNDERGROUND CABLE IN CITY.	892.12
6.	TOTAL NUMBER MILES EQUIVALENT SINGLE UNDERGROUND CONDUCTOR.	1255.53
6. (A)	TOTAL NUMBER AERIAL CABLE.	287.51
6. (B)	TOTAL NUMBER EQUIVALENT SINGLE CONDUCTOR AERIAL CABLE.	797.40
7.	TOTAL NUMBER AERIAL OPEN WIRE	3964.62
8.	TOTAL NUMBER SERVICE PIPES OR LATERALS.	70.21
9.	TOTAL NUMBER COMMERCIAL TRANSFORMERS IN CITY.	5591
10.	TOTAL NUMBER CUSTOMERS SUPPLIED DIRECTLY BY U.G. CONNECTION	25011
11.	TOTAL CUSTOMERS SUPPLIED DIRECTLY BY O.H. CONNECTION.	53023
12.	TOTAL NUMBER METERS INSTALLED IN CITY.	78034
13.	APPROXIMATE TOTAL NUMBER OF 1ϕ 2 WIRE 115 V. METERS IN CITY.	49027
14.	APPROXIMATE TOTAL NUMBER OF 1ϕ 3 WIRE 115/230 V. METERS IN CITY.	23372
15.	APPROXIMATE TOTAL NUMBER OF 1ϕ 2 WIRE 250 V. METERS IN CITY.	0
16.	APPROXIMATE TOTAL NUMBER OF 1ϕ 3 WIRE 250/500 V. METERS IN CITY.	0
17.	APPROXIMATE TOTAL NUMBER OF 3ϕ 3 WIRE 115 V. METERS IN CITY.	20
18.	APPROXIMATE TOTAL NUMBER OF 3ϕ 3 WIRE 250 V. METERS IN CITY.	250
19.	TOTAL NUMBER OF 3ϕ 4 WIRE 120/208 V. METERS IN CITY.	1779
20.	TOTAL NUMBER OF 1ϕ 3 WIRE 120/208 V. METERS IN CITY.	2150
21.	TOTAL NUMBER OF D.C. 2 WIRE AND 3 WIRE 250 AND 250/500 V. METERS IN CITY.	71
22.	APPROXIMATE TOTAL NUMBER OF 3ϕ 3 WIRE 575 V. METERS IN CITY.	1435

PROVIDENCE GAS COMPANY

TOTAL GAS SERVICES IN PROVIDENCE.				38655
MILES OF MAIN:				
L.P.	398 MILES	1,808 FEET		
H.P.	6 MILES	4,779 FEET		
NATURAL GAS	<u>1 MILE</u>	<u>1,800 FEET</u>		
TOTAL	406 MILES	3,107 FEET OR		406.6MILES
GAS HOLDERS				4
NUMBER OF METERS (ACTIVE)				57707
DECREASE IN GAS SERVICES 9/30/59 - 9/30/60				288
INCREASE IN MILES OF MAIN 9/30/59 - 9/30/60				1.2
DECREASE IN NUMBER OF METERS 9/30/59 - 9/30/60				828

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

TOTAL NUMBER WOOD POLES (INCLUDING JOINTLY USED, BUT NOT INCLUDING THOSE JOINTLY USED WITH NO OWNERSHIP).		17055
TOTAL NUMBER OF JOINTLY USED POLES WITH N.E. COMPANY.		13845
TOTAL NUMBER MILES MAIN CONDUIT (TRENCH MILES).		51.33
TOTAL NUMBER MILES U.G. CABLE.		262.66
TOTAL NUMBER MILES AERIAL CABLE		242.20
TOTAL WOOD TERMINAL BOXES ON POLES.		204
APPROXIMATE NUMBER OF TELEPHONES SUPPLIED DIRECTLY BY UNDERGROUND OR BLOCK DISTRIBUTION.		49117
APPROXIMATE NUMBER TELEPHONES SUPPLIED DIRECTLY BY OVERHEAD LINES ON HIGHWAYS.		43830
THE FOLLOWING ADDITIONS HAVE BEEN MADE TO THE EQUIPMENT IN USE BY THIS COMPANY DURING THE PAST YEAR:		
INCREASE IN THE NUMBER OF POLES (ALL HEADINGS)		127
ADDITIONAL MILES OF CABLE - U.G. AND AERIAL.		27.5
INCREASE IN THE NUMBER OF TELEPHONES IN USE.		1040

ESTIMATE

THIS REPORT COVERS PLANT STATISTICS AS OF SEPTEMBER 30, 1960.

WESTERN UNION TELEGRAPH COMPANY

CITY PLANT, PROVIDENCE, R. I.

NUMBER OF POLES.	NONE
NUMBER OF POLES JOINTLY OWNED.	NONE
NUMBER OF FEET OF U.G. CONDUIT. (TRENCH FEET)	276.
NUMBER OF FEET OF U.G. CONDUIT.	922.6
NUMBER OF MILES OF U.G. CABLE.	.743
NUMBER OF MILES OF WIRE IN U.G. CABLE.	65.12

NUMBER OF FEET OF TWISTED PAIR:	
(A) ON LICENSED ATTACHMENTS PRIVILEGED TO PURCHASE THE POLES OF OTHER COMPANIES.	16200
(B) ACROSS STREETS.	820
(C) OVER PRIVATE ALLEYS	280
MANHOLES OWNED.	1

TRAFFIC ENGINEERING DEPARTMENT.

TOTAL NUMBER OF TRAFFIC SIGNAL HEADS.	1084
TOTAL NUMBER OF TRAFFIC SIGNAL POLES.	577
TOTAL NUMBER OF TRAFFIC SIGNAL CONTROLLERS. (LOCAL)	157
TOTAL NUMBER OF TRAFFIC SIGNAL CONTROLLERS. (MASTER)	5
TOTAL NUMBER OF FEET OF UNDERGROUND DUCTS AND LATERALS.	63075
TOTAL NUMBER OF MILES OF UNDERGROUND CABLE	26.9
TOTAL NUMBER OF MILES OF AERIAL CABLE.	5.0
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR (UNDERGROUND CABLE)	136.5
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR (AERIAL CABLE)	24.1

THE ABOVE LIST OF EQUIPMENT IS OWNED BY THE TRAFFIC ENGINEERING DEPARTMENT. AT THE SAME TIME WE ARE USING DUCT SPACE AND CABLE BELONGING TO THE NEW ENGLAND TELEPHONE & TELEGRAPH COMPANY AND THE CITY OF PROVIDENCE FIRE DEPARTMENT AS FOLLOWS:

TOTAL NUMBER OF FEET OF DUCT SPACE BELONGING TO THE NEW ENGLAND TELEPHONE & TELEGRAPH COMPANY ASSIGNED TO CITY USE.	52530
TOTAL NUMBER OF FEET OF DUCT SPACE BELONGING TO THE FIRE DEPARTMENT OF THE CITY OF PROVIDENCE.	3040
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR UNDERGROUND CABLE BELONGING TO THE CITY OF PROVIDENCE FIRE DEPARTMENT AND ASSIGNED FOR TRAFFIC ENGINEERING DEPARTMENT USE.	57.6

DURING THE LAST FISCAL YEAR, NEW TRAFFIC SIGNAL INSTALLATIONS WERE COMPLETED AT THE INTERSECTIONS OF GEORGE M. COHAN BOULEVARD AND EAST STREET AND GEORGE M COHAN BOULEVARD AND BROOK STREET.

WITH THE COMPLETION OF THE EXTENSION OF THE HUNTINGTON EXPRESSWAY TO RESERVOIR AVENUE, THE TEMPORARY TRAFFIC SIGNALS AT HUNTINGTON AVENUE AND UNION AVENUE WILL BE REPLACED BY THE NEW PERMANENT SIGNALS AT BOTH RAMPS FROM THE EXPRESSWAY TO UNION AVENUE.

DEPARTMENT OF PUBLIC SAFETY

INVENTORY - SIGNAL CONSTRUCTION - FIRE ALARM DIVISION - POLICE SIGNAL.

	<u>TOTAL</u>	<u>AERIAL</u>	<u>U.G.</u>	<u>QUICK ACTION</u>	<u>DOOR TYPES</u>	
					<u>KEY</u>	<u>KEYLESS</u>
FIRE ALARM BOXES	942	578	364	920	9	13
CITY OWNED	669	405	264	669	0	0
PRIVATELY OWNED	273	173	100	251	9	13
POLICE CALL BOXES	167	103	64			

TOTAL NUMBER OF ALL BOX AND CABLE PEDESTALS.	334
TOTAL NUMBER OF ALL FIRE ALARM BOX PEDESTALS.	231
TOTAL NUMBER OF ALL POLICE BOX PEDESTALS.	67
TOTAL NUMBER OF ALL CABLE PEDESTALS ONLY.	36
TOTAL NUMBER OF MILES OF UNDERGROUND CABLES.	85.15
TOTAL NUMBER OF MILES OF PARKWAY CABLES.	1.47
TOTAL NUMBER OF MILES OF AERIAL CABLES.	3.52
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR U.G.	1258.40
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR AERIAL.	129.30
TOTAL NUMBER OF MILES OF EQUIVALENT SINGLE CONDUCTOR PARKWAY.	6.42
TOTAL FOOTAGE OF ALL UNDERGROUND DUCTS AND LATERALS OWNED BY THE CITY.	3445.6
TOTAL NUMBER OF POLES OWNED BY THE CITY.	36
INCREASE IN THE NUMBER OF FIRE ALARM BOXES OWNED BY THE CITY.	4
INCREASE IN THE NUMBER OF FIRE ALARM BOXES OWNED PRIVATELY.	10

STREET LIGHTING SUMMARY.

GOOD STREET LIGHTING IS, IN OUR DAY, A NECESSARY ADJUNCT TO THE PROGRESS OF OUR CITY AND THE WELFARE OF OUR CITIZENS. THE POLICY OF THIS DIVISION HAS BEEN, AND WILL BE, TO SEE THAT THE FULLEST POSSIBLE VALUE IS DELIVERED FOR EVERY DOLLAR EXPENDED FOR THIS PURPOSE, BY PROVIDING PROVIDENCE WITH THE MOST MODERN AND EFFECTIVE STREET LIGHTING AVAILABLE.

SINCE THE PRIMARY PURPOSE OF GOVERNMENT IS TO PROTECT THE LIVES AND PROPERTY OF ITS' CITIZENS, OUR EFFORTS, IN THE FIELD OF STREET LIGHTING, HAVE BEEN DIRECTED ALONG THE SAME PATH, AND WITH CONSIDERABLE SUCCESS. THE POWERFUL MODERN LIGHTING, INSTALLED ON MANY OF OUR STREETS, HAS REDUCED NIGHT-TIME TRAFFIC ACCIDENTS, MADE PERSON AND PROPERTY SAFER ON OUR STREETS AND REDUCED THE BURDEN BORNE BY OUR POLICE AND FIRE DEPARTMENTS. IN TWO AREAS IT HAS GREATLY IMPROVED BUSINESS CONDITIONS BY ELIMINATING DARK CORNERS AND SHADOWS, WHICH GAVE COVER TO MUGGERS AND KINDRED CRIMINALS.

WE FEEL THAT OUR IMPROVED STREET LIGHTING PLAYED AN IMPORTANT PART IN ENABLING THE TRAFFIC ENGINEERING DIVISION TO GAIN NATIONAL RECOGNITION FOR TRAFFIC SAFETY ON OUR STREETS.

DOWNTOWN PROVIDENCE STREET LIGHTING IS ALMOST ENTIRELY CONVERTED TO 15,000 LUMEN MERCURY VAPOR LUMINAIRES OF MODERN DESIGN. THESE CAN BE CONVERTED TO A HIGHER LIGHT INTENSITY, IF NECESSARY.

PLANS TO RE-LIGHT THE STREETS, RADIATING FROM THE DOWN-TOWN BUSINESS AREA, WITH MERCURY VAPOR LUMINAIRES OF INTERMEDIATE INTENSITY ARE UNDER STUDY.

WE ARE CONSTANTLY IMPROVING RESIDENTIAL LIGHTING AS MUCH AS POSSIBLE WHERE IT IS FEASIBLE BY INSTALLING MORE UNITS TO FILL IN THE EXISTING LONG SPACINGS THAT WERE PRACTICAL YEARS AGO WHEN THEY WERE INSTALLED; BUT WHERE NEW CONSTRUCTION OF HOMES AND THE FULL GROWTH OF TREES HAVE NOW MADE THOSE SPACINGS IMPRACTICAL AS WELL AS UNSAFE AT NIGHT. POSSIBLY IN THE FUTURE, A CONTROLLED TREE PLANTING SYSTEM, BY OUR DIFFERENT MUNICIPAL DEPARTMENTS, WILL CORRECT THIS STREET LIGHT SHADING BY TREES IN OUR NEIGHBORHOODS BY RECOMMENDING THE PLANTING OF NEW TREES BACK OF THE PROPERTY LINE AND NOT ON THE CURB LINE AS IS PRESENTLY AND FORMERLY DONE. MANY OF OUR CITIES HAVE RESORTED TO THIS NEW TYPE OF TREE PLANTING WITH EXCELLENT RESULTS. SOME OF OUR EXISTING NEIGHBORHOOD STREETS, AT THE PRESENT TIME, ARE IMPOSSIBLE TO ADEQUATELY STREET LIGHT AT ALL BECAUSE OF TREE FOLIAGE GROWN FROM TREES ON BOTH SIDES OF THE STREET EXTENDING OUT OVER THE CENTER LINE OF THE HIGHWAYS.

THIS YEAR BY PROGRESSIVENESS, WE MEAN THE COMPLETION OF THE LIGHTING ON THE NEW HUNTINGTON AVENUE EXPRESSWAY, AND THE RELIGHTING OF THE NEW WEST RIVER AREA WHICH WILL CONSTITUTE HEAVY INDUSTRIAL LOCATIONS AND THE LAST OF THE THREE NEWLY PLANNED STREETS WILL BE LIGHTED WITH OUR NEW 7000 LUMEN MERCURY VAPOR. THE NEXT AREA TO BE PLANNED AND REDEVELOPED IS THE LIPPITT HILL SECTION AND WE SHALL ADEQUATELY RELIGHT THAT SECTION WHEN THE TIME ARRIVES. WE ARE NOW DIRECTING OUR EFFORTS ON THE NORTH-SOUTH FREEWAY IN THE AREA FROM HAYWARD PARK TO ALLENS AVENUE. THE NEXT LEG SHALL BE FROM HAYWARD PARK TO WEST EXCHANGE STREET.

INCREASED FIELD WORK WITH THE UTILITY COMPANIES ON POLE LOCATIONS, SUCH AS DRIVEWAYS, REMOVALS, SETTINGS, UNDERGROUND CONDUIT WORK ALONG WITH OUR OWN STREET LIGHT PETITIONS WITH THEIR NECESSARY FIELD WORK AS WELL AS SIGN INSPECTIONS, IN REGARD TO OVERHEAD LINE CLEARANCE, HAS LIMITED MY OFFICE ROUTINE.

CONSEQUENTLY, IT WOULD SEEM ADVISABLE AGAIN TO RECOMMEND TO THE DEPARTMENT THAT AN OFFICE CLERK BE ADDED TO THE STREET LIGHTING DEPARTMENT TO MAINTAIN AND KEEP UP TO DATE CARD FILES, MAP FILES AND OUTAGE RECORDS SO THAT OUR DEPARTMENT CAN WORK IN CLOSER PROXIMITY AND MORE EFFICIENTLY WITH BOTH UTILITY COMPANIES.

VERY TRULY YOURS,

PETER J. HICKS, JR.  
PUBLIC SERVICE ENGINEER.

MAR 2 2 50 PM '61  
CITY CLERK'S OFFICE  
PROVIDENCE, R.I.