BUREAU OF ENGINEERING, SURVEYS AND ZONING

ANNUAL REPORT FOR 1934

DRAINAGE

* * * * *

For the year 1934 there was available for the construction of main sewers $251,647.54 increased to $269,647.54 through the cancellation of one contract and for branch sewers $40,037.59 increased to $42,137.59 through the cancellation of one contract. No new contracts were entered into for main or branch sewers although the completion of one private sewer contract made an increase of 0.14 miles to the drainage system of the City. At the end of 1934, there was a total of 1,782 miles of sewers completed within the limits of the City of Philadelphia. $260,731.47 was available for new sewers in place of old sewers from which one new contract was entered into and 0.4 miles of sewers completed.

CLEARFIELD STREET FROM EAST OF FIFTH STREET TO WEST OF SIXTH ST. A contract was entered into to replace a portion of this sewer between these limits due to a break occurring in 1933. 193 feet of 10'3" diameter brick sewer was reconstructed.

WALNUT STREET SEWER BETWEEN POINTS WEST OF FRONT STREET AND EAST OF SECOND STREET. A small section of this sewer collapsed in August of this year and was repaired as emergency work. The sewer was 8'3" in diameter.

WINGOHOCKING MAIN SEWER ON LINE OF WINGOHOCKING STREET FROM PHILIP STREET WESTWARD. No physical work was done this year, final payment awaiting settlement of claims. This is an 18'0" x 17'0" reinforced concrete sewer.

BRIDGE CONTRACT WORK - 1934

HENRY AVENUE BRIDGE OVER WISSAHICKON CREEK - This Bridge was begun in 1930 and at the end of that year was approximately 44% completed. At the end of 1931, the structure was 91% completed with paving of the bridge floor and the sidewalks remaining to be done. The physical work was completed on March 1,1932, the total cost of the project being approximately $1,770,000. Final estimate has not been paid.

ABOLITION OF GRADE CROSSINGS - 1934

GERMANTOWN AND CHESTNUT HILL ELEVATED - The physical work contracted for to date on this project was completed on June 1, 1933. The agreement is still active.

PENNSYLVANIA TERMINAL IMPROVEMENT - The contract entered into on January 19,1933 to close up the gap on the north shoulder of Market Street with a viaduct between the Schuylkill River Bridge and 30th St. was completed. The contract involved an expenditure by the City of $99,569.15

CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING, SURVEYS AND ZONING

CITY HALL ANNEX

FRANK H. CAVEN,
DIRECTOR

JOHN H. NEESON,
CHIEF OF BUREAU

January 3, 1935.

REPLY AND REFER TO: BES:TT:C

From : Permit Division.

To : John E. Allen, Principal Assistant Engineer.

Subject : Sewer Permit Division Annual Report for year 1935.

Permits -	332
Connections made to Single system -	473
Connections made to double system	366
Repairs made to sewers	421
Total -	1,592

Total number of plans filed, transit and C.W.A. lateral & Inspector Diaries 53

General Routine of the office

Information dailyto Architects, builders, Title men, Plumbers and assignments to our inspectors

Total receipts - $5,636.56

THOMAS J. TAGUE,
Permit Division
Room 203.

2-1934

OPERATIONS OF THE BUREAU OF ENGINEERING, SURVEYS & ZONING FOR THE YEAR 1934.

DESIGN:

Construction plans for the bridges on line of City Avenue at Overbrook Station and at Bala Station;
Surveys and construction plans for 23 miles of City highways, under the program of Emergency Highway Construction National Recovery Municipal Highway Projects;
Construction plans for 5 private sewer contracts and 2 reconstruction sewer contracts;
Construction plans for 25 mechanical intercepting gates for removing sewage pollution from watercourses;
Continued design work on 7 items, included in the sewage treatment program.

CONSTRUCTION:

Completed work under Contracts #13 and #14 of the Pennsylvania Terminal Improvement, comprising the viaducts in 30th Street and Schuylkill Avenue West and the South Side of Market Street between Schuylkill Avenue and 30th Street;

Supervised the construction of a branch sewer at private cost and carried out the reconstruction of the main sewers at Front and Walnut Streets and at 6th and Clearfield Streets;

Furnished lines and grades for 16¾ miles of highway construction, and for various departments and bureaus carrying out CWA and LWD projects.

OPERATIONS:

Investigation of 1250 complaints of traffic hazards and conditions;
Complete traffic survey and plan of 475 school locations;
Issued 3356 Zoning Permits, out of 4783 applications;
" 1100 drain connection permits;
" 2700 property title clearances;
Checked 6000 chemical and physical tests of the materials and supplies;
Completed a precise survey covering 16 square miles in the northeastern section of the City, which included the determination of the boundary line between Philadelphia and Bucks Counties;
Prepared specifications and proposals, scheduled bids, issued orders and checked bills for materials, tools and equipment used on CWA and LWD projects chargeable against the appropriation of City Council.

MISCELLANEOUS:

Supervised the making of applications for CWA and LWD work for all departments under the Mayor;
Completed the cleaning and widening of Frankford Creek;
The installation of 24,000 linear feet of lateral sewer connections;

3-1934

MISCELLANEOUS (Cont'd.):

The cleaning of main outlet sewers;
The painting of all units of sewage disposal equipment;
as CWA and LWD projects.

Now conducting the dredging of the Schuylkill River and reconstruction work on the Arch Street Viaduct, as LWD projects.

The Bureau functioned for the year within the Councilmanic appropriations provided.

JEA:E
12-28-34/

1934

During the year 1934, the Bureau operated with practically the same personnel as in 1933, and by not filling the existing vacancies, kept within the appropriation. In the items for purchase of materials and supplies for operating the District Office, Sewage Disposal Plants and Pumping Station, the appropriations were less than in 1933. However, by drastic economies, the Bureau has been able to operate within the appropriations.

The lack of cash in the Loan Fund Items, prevented the Bureau from prosecuting any new construction work during the year. There were however, two contracts completed in 1934, which were carried over from 1933. The work included the completion of a Viaduct on the South Side of Market Street from the Schuylkill River to 30th Street, at a total cost of $117,320.35, of which the City's share was $99,569.15; the balance was borne by the Pennsylvania Railroad. The other project consisted of constructing a new sewer in place of old sewers in Clearfield Street at Sixth Street, which cost $28,762.65. One emergency contract was carried on during the year which consisted of repairing a break in the sewer in Walnut Street at Front Street. The work cost $1,867.90.

C.W.A.

Under the direction of J. H. Neeson, Chief Engineer and Surveyor, acting as Secretary of the Mayor's Committee, the work of cooperating with the Local Divil Works Administration (lster the Local Works Division of the FERA), was carried on, and projects for various City Bureaus and Departments, were selected and approved. When all of these projects are active, work will have been provided for 14,689 men. Available employees of the Bureau were assigned to purchasing supplies and materials for carrying on this work. The City's commitment for materials and supplies to date, amounts to $573,907.66. The Government's expenditure for payrolls on these projects will amount to - $2,508,810.00.

CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING, SURVEYS AND ZONING

CITY HALL ANNEX

FRANK H. CAVEN,
DIRECTOR

JOHN H. NEESON,
CHIEF OF BUREAU

REPLY AND REFER TO: TB:E

December 28, 1934.

MR. ALLEN:

Subject: MATERIAL FOR SPECIAL REPORT.

The most noteworthy items covering work accomplished during the past year are, as follows:

During the past year, the Survey Districts made and prepared surveys and plans for the improvement of 23 miles of City highways under the program of the Emergency Highway Construction National Recovery Municipal Highway Projects, approved by the State; and gave the lines and grades required for 16¼ miles of these highways, of which about 15 miles have been completed to date and 1½ miles are now under construction.

The furnishing of lines and grades and other official data for various departments, bureaus and other agencies carrying out CWA and LWD projects. Many different classes of work were involved, such as dikes, ditches, sewer laterals, sidewalk construction, grading and surfacing of country roads, amounting in the aggregate to many miles of improvements.

During the same period, the Districts have been engaged in making a complete traffic survey and plan of every public and parochial school in the City, of which there are approximately 475.

Also, personal investigations have been made of 1250 complaints relating to traffic hazards and conditions. The work of investigation has been marked by the endeavor to interview each complainant personally. This procedure has added considerable to the time element involved because, in many instances, three to four visits had to be made before the proper person could be contacted.

A precise survey of the extreme Northeast section of the City, covering an area of sixteen square miles, was completed. This survey included the determination of the location of the physical boundary line between Philadelphia and Bucks County. The area covered was never previously accurately surveyed and the work done will prove a valuable asset in the future expansion and development of the City.

6-1934

Another feature of the year has been the amount of work accomplished by the small zoning unit of the Bureau. During this period, nearly 11,925 requests for information have been received, or at the rate of 40 per day; 4783 Zoning applications have been filed, or at the rate of about 16 per day; and 3356 Zoning permits were issued, or about 11 per day.

Thomas Buckley

THOMAS BUCKLEY,
Assistant Chief Engineer.

ANNUAL REPORT FOR THE YEAR 1934

DRAINAGE DIVISION

The rainfall for the year 1934, as reported by the Weather Bureau, amounted 38.36 inches, as compared to an annual average of 40.41 inches for the past 62 years.

Mingo Creek Pumping Station

This station is located on the west bank of the Schuylkill River north of Penrose Ferry Road, and was constructed in 1896 to provide surface drainage for the lowlands of the 40th Ward. The surface elevations throughout the lowlands are generally below the high tide level in the surrounding rivers, and this area is therefore protected from flooding by a system of dikes along the water front. The natural creeks traversing this area have been converted into a system of drainage ditches and discharge into the main channel of Mingo Creek, which terminates at the site of the Pumping Station.

The hydraulic fill made by the U. S. Government contractors along the Delaware River front between Hog Island and Fort Mifflin has greatly reduced the hazard of flooding during times of high tides in the river.

Two 150 horsepower oil fired boilers provide steam for driving 2 horizontal centrifugal pumps of a combined capacity to lift 60 million gallons per day and discharge the water into the Schuylkill River against a head of 13 feet.

Employees of the Water Bureau and this Bureau overhauled both pumping units and engines in service since 1896. The brickwork of both boilers was repaired and a water treatment system installed. Other new equipment installed a fuel oil heater, duplex piston type feed water pump and feed water heater.

The steam pipe lines were overhauled and recovered with magnesia.

The building was painted inside and outside by L.W.D. workmen.

The pumpage for the year is estimated as 2013 million gallons with an oil consumption of 125,000 gallons. The cost of operation and maintenance for the year amounted to $14,934.98.

Southwest Sewage Pumping Station

This Station is located on a 1000 acre tract near Penrose Ferry Road and Island Avenue, the proposed site of the Southwest Sewage Treatment Works.

The motor-driven pumping equipment now installed consists of four vertical volute pumps designed for a total daily pumpage of 50 million gallons against a 40-ft. head. Future installations will increase the pumping capacity of this station to 160 million gallons daily.

This Station was placed in operation August 23, 1927.

The Collecting Sewer has been constructed from the Pumping Station to a point in 75th Street 30 ft. southeast of Wheeler Street, with a branch from 80th Street near Erwig Avenue to 82nd Street and Bartram Avenue.

The small quantity of sewage now collected requires about 3 hours daily pump operation, and will continue to be discharged into Eagle Creek pending the design and construction of the Sewage Treatment Works to be located adjacent to this Station.

The building was painted inside and outside by L.W.D. workmen.

The total cost of operation and maintenance amounted to $10,433.96, of which $3088 was expended for power and light, and $6581.64 for wages.

Frankford Creek High Level Grit Chamber

This Station is located on a tract bounded by "N" Street, Hunting Park Avenue, "O" Street and Lycoming Street, and provides coarse screening and preliminary sedimentation for sewage collected by the Wingohocking and Tacony Creek Intercepting Sewers, so as to remove coarse materials and sand from the sewage before it enters the pressure conduit constructed in Wheatsheaf Lane, and leading to the Northeast Sewage Treatment Works.

The Frankford Creek High Level Collector leading to the Grit Chamber is designed for a flow as high as 200% of the average dry weather flow, to afford additional protection to that portion of the Frankford Creek flowing through Juniata Park.

9-1934

The permit issued by the Pennsylvania State Department of Health provides, and the Grit Chamber and Treatment Works have been designed for, the treatment of sewage flows as high as 141% of the average dry weather flow. Accordingly, a stormwater overflow weir has been constructed at a point in the sewer where it connects with the Grit Chamber, and the excess of stormwater is conveyed directly to Frankford Creek below the park property.

During the year 1934, from a total sewage flow of 12,423 million gallons, 18,745 cubic feet of wet screenings were intercepted, which equals 1.5 cubic feet per million gallons of sewage.

29,915 cubic feet of wet grit, equal to 2.4 cubic feet per million gallons of sewage, were intercepted, washed and hauled to the Northeast Sewage Treatment Works for disposal on low ground. Analysis of the washed grit indicated a volatile matter content of 3.9%.

1250 cubic feet of grease were intercepted and disposed of with the screenings.

The iron fence surrounding the grounds was painted by L.W.D. workmen.

The total expenditure for operation and maintenance for the year 1934 amounted to $7517.99.

Northeast Low Level Sewage Pumping Station and Grit Chamber

These Stations, together with the Northeast Sewage Treatment Works, are located on the 160 acre tract along Wheatsheaf Lane between Richmond Street and the Delaware River.

The Low Level Grit Chamber is designed to provide coarse screening and preliminary sedimentation for sewage collected by the Upper Delaware Collecting Sewer, the Pennypack Creek Intercepting Sewer, the Upper and Lower Frankford Creek Low Level Intercepting Sewers, and the Somerset Low Level Collecting Sewer now under construction, so as to remove coarse material and sand from the sewage before it enters the pumping station, at which point the sewage is pumped to the Imhoff tanks for further sedimentation before discharge into the Delaware River.

10-1934

In the Low Level Pumping Station, 2 - 36" and 4 - 24" motor driven centri fugal sewage pumps of the vertical volute type have been installed. Two of these 24" pumps are direct connected to variable speed induction motors. The 2 - 36" and 2 of the 24" pumps are direct connected to constant speed synchronous motors.

Electricity service is supplied by the Philadelphia Electric Company at 2300 volts pressure.

These stations were placed in operation July 16, 1930.

For the year 1933 the total sewage flow amounted to 4872 million gallons. 211 cubic feet of wet screenings were intercepted during the year.

671 cubic feet of wet grit were intercepted and conveyed by pneumatic conveyors to the lowland at the site of the work.

The outside metal work and the ceiling of the pumping station were painted by L.W.D. workmen.

Northeast Sewage Treatment Works

The first section of the Northeast Sewage Treatment Works was placed in operation October 29, 1923, and comprises 32 reverse flow Imhoff Tanks and 80 sludge drying beds, and is designed for a sewage flow of 60 million gallons per day at a detention period of 3 hours.

The total estimated volume of sewage treated during the year 1934 amounted to 17,295 million gallons, 12,423 million gallons of which reached the works by gravity from the Frankford Creek High Level Collecting Sewer, and 4872 million gallons pumped from the Upper Delaware Low Level Collecting Sewer and Upper Frankford Creek Low Level Intercepting Sewer.

The character of the sewage varies from a rather heavy concentrated day flow containing trade waste colored with dyes, to a more dilute night flow. The volume of dry weather flow fluctuates between a minimum rate of flow of 30 MGD occurring about 5 A.M., and a maximum rate of about 65 MGD occurring about 5 P.M.

Determination of settling solids by Imhoff settling glasses indicates a consistent removal of 100% throughout the period.

Samples for suspended solids collected at 3-hour intervals and made into a weekly composite sample for Gooch crucible determination indicate the following average total suspended solid content:

Works influent	120 PPM
Works effluent	40 PPM

or a reduction of 67% total suspended solids.

While oxidation processes are not employed at these Works, there is an improvement noted in the effluent, as indicated in the biochemical oxygen demand tests which are reported as follows:

Works influent	243 PPM
Works effluent	145 PPM

The total quantity of sludge withdrawn from the Imhoff tanks during the year amounted to 16,000 cu.yds. This sludge was dark in color, well digested, and flowed freely. Offensive odors were not noted at any time in the vicinity of the Lagoon into which the sludge was discharged.

Laboratory analysis of the sludge withdrawn is reported as follows:

Specific gravity	1.018
Moisture	93.4
Dry residue, volatile	55.8
" " fats	17.8
Alkalinity (Methol orange)	1150 PPM

Gas ebullition has been active in all gas vents of the tanks during the year, and foaming was in evidence in varying degrees of intensity from April 1st to late in October.

Intercepter Patrol

For intercepting all dry weather flow of sewage and the proper amount of rainwater contaminated with sewage, intercepting devices have been provided at the point of connection between existing main sewers and the collecting or intercepting sewers.

12-1934

For those connections beyond the range of tidal influence of the rivers or creeks, interception has been accomplished by means of a slotted opening built into the invert of the main sewer and provided with an adjustable sliding plate cover. In the larger sewers, adjustment of the flow to the intercepting sewer is accomplished by hand operated sluice gates located in the connection between the main sewer and the intercepting sewer, and behind a dam constructed across the main sewer between this connection and the receiving body of water.

For those connections within the tidal influence of the rivers or creeks, intercepting chambers of concrete construction and with two hydraulically operated sluice gates have been provided; one gate of the vertical type for the interception of the sewage flow and first flush of street wash, and the other of the horizontal type located in and transversely to the main sewer, and between the vertical intercepting gate and the water course. This horizontal gate serves the dual function of passing stormwater to the river or creek when in an open position, and of excluding tidewater from the dry weather intercepter when in a closed position.

The two sluice gates are actuated through a common hydraulic cylinder, direct connected to the horizontal sluice gate and to the vertical sluice gate by means of flexible cable over sheaves.

The rise and fall in elevation of the sewage level in the main sewer transmits motion, through a float located in the water, to a 4-way valve which in turn, by City water pressure, actuates the hydraulic cylinder.

Intercepting gates and slots are examined immediately after each storm, and during dry weather periods at least once a week.

Little difficulty is encountered in maintaining the intercepting slots in service except from falling leaves in the autumn season, and occasionally from grit and sticks reaching the sewers during times of heavy rains from undeveloped areas with unpaved streets.

The operation of the hydraulically controlled intercepting sluice gates is likewise satisfactory, but greater expenditure of time for maintenance is required.

13-1934

The discharge from the sewers into tidal streams during times of storm carries considerable sand and grit which tends to shal in front of the sewer outlet. The sand backs up into the sewer in some instances to the vicinity of the gates, and until removed interferes with the satisfactory operation of the gates.

Northeast Sewage Laboratory

The total number of samples on which chemical, bacteriological and physical determinations were made, totalled 3812. Of this total, 2706 samples were in connection with the operation of the Northeast Sewage Treatment Works, 641 samples from the Experimental Station, 126 trade waste samples, 24 samples from Frankford Grit Chamber, 150 samples from Byberry Sewage Treatment Works, and 111 samples from the River Patrol Work.

The outside metal and woodwork of all buildings, the pipe railing around the Imhoff tanks, and the metal fence enclosing the works, were painted by C.W.A. workmen with material furnished by the City.

14-1925

Plans Completed
Advertised and Bids Received except Bristol St. & Adams Ave.

15-1934A 1

Sewage Disposal Project.

Intercepting Chambers and appurtenant work to connect to the Upper Frankford Creek Low Level intercepting sewer in

1 Frankford Ave - between Frankford Crk and Cornell St
2 Frankford " - S.W. of Frankford Creek
3 Tonesdale " - West of Frankford Creek
4 Cornell St - between Frankford Crk & Kensington Ave
5 Wingohocking St. Northeast of Frankford Creek.
6 Bristol St and Adams Ave - between Pkfd Creek and Cuan St.

Sewage Disposal Project

Int: Chambers and appurtenant Work, to Connect to the Lower Frankford Creek Low Level intercepting Sewer in

1 Bridge St: northwest of Frankford Creek.
2 " " Northeast " " "
3 Ash St: S.E. of Frankford Creek
4 Wakeling St. 27½ ft. South of Stiles St. to Frankford Creek
5 Casimir St: South of Frankford Creek
6 Lefevre St: between Frankford Creek & Gaul St
7 Orthodox St. north of Frankford Creek.
8 " " South of " "
9 Duncan St: between the Frankford Creek & Lefevre St.

Plans Completed
Advertised and bids received except Duncan St

15-1934B

Sewage Disposal Project

Intercepting Chambers and Appurtenant Work to connect to the Somerset Low Level Collector

Gastor Avenue at Balfour St
Venango Street between Balfour and Gasper Sts
Tioga Street from N.W. of Gasper St. to Carbon St
Ontario St between Balfour and Gasper Sts
Westmoreland St between Delaware Ave. and Allen St
Allegheny Ave S.E. of Bath St
Indiana St from S.E. to N.W. of Allen Street
Cambria St. bet Melrose St and Allen St
Line of Somerset St East of Richmond St

~~Plans Completed and Checked~~

Plans Completed ✓

16-1934

Sewage Disposal Project 1934

West Central Schuylkill Low Level Intercepting Sewer from Mantua Creek Sewer outlet north of Fairmount Dam to the Central Schuylkill Pumping Station near 34th St. and University Ave.

Plans 80% Completed

2.25 Miles

Intercepting Chambers and Appurtenant Work to connect to West Central Schuylkill Low Level Intercepting Sewer.

On Mantua Creek Sewer in Schuylkill Ave. W. 1730' N of Spring Garden St

On Haverford Ave Sewer " " Ave W

On Spring Garden St. Sewer in Schuylkill Ave W

At Walnut St in Schuylkill Ave W.

Connection from Larchwood Ave Sewer N of South St

On Private Property 600 ft E. of South St

On Private Property 1060 ft E of South St

Connection from University Ave Sewer in University Ave and Schuylkill Ave W. from 350' W. to 250' E. of 34th St.

Plans 60% Completed

17-1934

Central Schuylkill Pumping Station
North of 34th St and University Avenue

Plans 35% Completed

Force Mains from Central Schuylkill Pumping Station to ~~Mill Creek Sewer Outlet~~ a temporary outlet into the Schuylkill River North of the Mill Creek Sewer

Plans 25% Completed

0.5 mile

Extension of Force Mains and gravity connection to the S.W. Main Gravity Intercepting Sewer from N of Mill Creek Sewer to 47th St. and Paschall Avenue

1/4 mile ~~Plan 10% completed~~ started

S.W. Main Gravity Intercepting Sewer from 43rd and Locust St ~~to~~ S.W. Sewage Treatment Works Plans 15% Completed

5.6 miles

Cobbs Creek High Level Cut-off Sewer in 60th Street from Cobbs Creek Boulevard to Grays Ave Plans 15% Completed

.8 Mile

18-1934

East Central Schuylkill Low Level Intercepting Sewer from the Fairmount Dam to a point on the east side of the Schuylkill River south of 31st Street.

25% Completed

2.6 miles

Testing Laboratory Activities

Jan 1st to Nov 15th 1934.

	Chemical	Physical	
Asph. Bit. Cements	375		
" Compounds	56		
" Wearing Surfaces	339		
Boiler Feed Waters.	677		
Cements, Hydraulic.	41	614	
Coal.	973		
Concrete admixtures.	7		
" Aggregates	3		
" Building Blocks.		290	
" Cores.		79	
" Cylinders.		1201	
Fire Clay & Fire Brick		18	
Metals, Ferrous, Non Ferrous.	10	22	
Miscellaneous	25	3	
Oils, Fuel.	1116		
" Gasoline.	52		
" Grease	16		
" Headlight	4		
" Lubricating	79		
Paints & Gypsum.		4	
Prepared Paints.	230		
Paint Driers	11		
Paint Linseed Oils	25		
Pastes, Paint	36		
Pigments "	9		
Putty	5		
Turps, Tung & Turpentine Substitutes	24		
Varnishes	20		
Rubber Fire Hose	8	6	
Soaps & Soap Materials.	22		
Steel Gratings	3		
Vitrified Products		16	
	3166	2253	5419

20-1934

CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING, SURVEYS AND ZONING
CITY HALL ANNEX

FRANK H. CAVEN,
DIRECTOR
JOHN H. NEESON,
CHIEF OF BUREAU

November 19, 1934.

REPLY AND REFER TO: BES:TT:C

From : Permit Division

To : P. S. Fisher, Chief Clerk.

Subject : Sewer Permit Division.

January 1, 1934 to November 17, 1934.

Permits -	296	
Connections made to single systems	298	
Connectionsmade to double systems	375	
Repairs to Sewers	382	1,055
Total number of plans files, Transit and CWA - laterals		39
Phone Calls, Daily -		25
Title information, Daily -		100

and general information to architects, builders and plumbers and giving assignments to inspectors.

Inspectors - Wm. Kilpatrick and William Atack -

Total Receipts - $5,123.56.

Permits issued 1055
Plans filed 39
Information given 1300
Title clearances 2700
Receipts $5,184.56

THOMAS J. TAGUE,
Permit Division.

21-1939

Assistant Engineer - Drainage Division

Drainage information to Public — 5 per day
Drainage information to Engineers, Surveyors and other Bureaus — 5 per day
Supervision of Sewer Registrar's office and approval or refusal of 100 special connections applied for.
Preparation of Private Sewer contracts and records for 3 streets
Ordinance data prepared for 40 introduced ordinances and estimation of drainage costs.
Drainage information prepared for building permits for 304 dwellings
Contract payment estimates checked 20 estimates
Examination of all highway paving plans in connection with drainage releases 25
Scheduling all bids for CWA and LWD city materials and assisting in preparation of contracts for same.
Maintenance of drainage ordinance records and records of contract status.

2 323 / 40 / 283 — 270 / 8 / 1350

Data to public + City Departments 2700.-
Special sewer connections ruled upon 100.
Contracts for private sewers 3
Reports on proposed ordinances 40
Building permits applications passed upon 304
Contract estimate payments checked 20
Paving plans checked and released 25
Scheduling bids for C.W.A. + L.W.D. purchases

22-1934

1934

Division Eng. Const. J.V.B.

Sewer Contracts – 1 - 4 Mo. --- 1 - 1 Mo. work

Inspection Permits Sewer work. 11 - 4 Mo. work

Grade Crossings
So. Phila. Agreement 10 Visits & Reports
Phila. Terminal Agreement – almost continuous
Germantown & Chest. Hill Agreement – 2 Months
Manayunk Elevated Agreement – 5 Visits & Reports

Grade Crossing Contracts – # 13 to # 14

Other Investigations & Reports – 75.

State work: – observe at request Mr. Staples
Bridge – City Line at Overbrook
" City Line at Bala
Sewers City Line, Haverford Av: Bethlehem Pike

S.W.D. –
Walling. Frankford Creek – 7 Mo.
Sewer Laterals – 5 Mo.
Dredging Frankford Creek – 4 Mo. 23-1934