New York State Archives

New York State Engineer and Surveyor Survey records and estimates for proposed Chemung Canal reconstruction B0390

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Overview of the Records

Repository:	New York State Archives
Summary:	This series consists of maps, profiles, plans, survey documents, diagrams, estimates, the final report on the proposed improvement of the Chemung Canal. Also included are daily journals of Resident Engineer Louis A. Burns who was in charge of the project and prepared the final report. Also included are maps of Montour Falls and surrounding communities; plans and profiles of the proposed feeder, the proposed new channel; and diagrams of water levels and channel depth.
Creator:	New York (State). State Engineer and Surveyor
Title:	Survey records and estimates for proposed Chemung Canal reconstruction
Quantity:	1 cubic foot
Quantity:	22 maps and plans
Quantity:	5 volume(s)
Inclusive Date:	1913-1914
Series:	B0390

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Administrative History

The records are the result of work undertaken upon passage of Chapter 220 of the Laws of 1913, which granted appropriations for making several surveys to improve and extend the state's canals. It particularly stated that the State Engineer and Surveyor should cause a survey to be made for "reconstruction of the Chemung Canal"; and that he should report to the Legislature of 1914 on his investigations, together with estimates of the cost for which the work might be done.

The proposed improvement amounted to a continuation of the Barge Canal, which extended south from Seneca Lake to the terminus at Montour Falls. Interest in accessing the waterways and coal resources in Pennsylvania and in providing for more cost effective and competitive measures against the railroads prompted the investigation of expanding the canal system toward the border. The records also deal with a proposed feeder that would insure the canal an adequate water supply. This was essential in a geographic area that was noted for both torrential flooding and heavy runoffs of available water.

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Scope and Content Note

The series consists of various maps, profiles, plans, survey documents, diagrams, estimates, and the final report on a proposed improvement of the Chemung Canal. Also included are two volumes of the daily journal of the Resident Engineer in charge, Louis A. Burns, who prepared the final report.

The records include: a blueprint of a topographic survey of Deckertown and L'Hommedieu Creeks, Montour Falls, Schuyler County, 1912; a blueprint map showing part of Village of Montour Falls (made on account of a flood damage claim of the Shepard Electric Crane & Hoist Co. from a 1919 survey) and showing a profile of dikes along Catharine and Fall creek; a blueprint map of Montour Falls showing area flooded by high water March 1, 1902; the Chemung Canal Survey Profile of Proposed Feeder from Corning to Horseheads and the Chemung Canal Survey Profile from Montour Falls to Waverly which show depth and type of soil material (e.g., "sand and loam", "very stiff blue clay", "loose, coarse gravel", "impervious hard pan" etc.) and which give station numbers, elevation, and a "B.H."; designation (the meaning of which is not know); a tracing with inked notes of the sewer at Montour Falls, made from field sketch 5/15/27, apparently done in response to request for change in location of creek to relieve a flood condition between Fall Creek and the Barge Canal terminal and showing the area in and around Fall and Catharine Creeks (surrounding property, streets, businesses), and the canal line, old canal prism, buried walls, catch basins, drains, etc.; the Plan for Proposed Improvement of Fall Creek at Montour Falls (along with a typical section), showing the proposed new channel (outlined in orange) between Barge Canal and Falls Creek;

the Profile of Proposed Chemung Canal Improvement from resident engineer's office in Elmira, dated February 14, 1914, including an inset on the type of ground material (i.e., rock, gravel, clay) for five sectional areas from Montour Falls to Waverly; two books titled "Reference Copy of Estimate Chemung Canal Survey" dated April 1914, giving cost estimates for prism excavation, structures, and damages as well as measures and amount of estimated expenditure and figures on the water supply required and the estimated cost of reservoirs and cost per million of cubic feet of water stored; the "Standard Daily Journal" for 1913 and 1914 of Louis A. Burns, Resident Engineer at Elmira; an undated book of elevations and base line stations (Montour Falls to Horseheads) and benchmarks ("Copied from Book #8 for use of topog. Party"); a copy of the report on the proposed improvement of Chemung Canal written by Louis A. Burns, dated May 15, 1914; fourteen sheets diagramming water levels and channel depths, six labeled "Montour Falls Proposed New Creek Channel, Feb. 1915" and eight pertaining to the feeder; nine sheets of diagrams used as plates in the report on the proposed Chemung Canal improvement and illustrating hydrology and water supply issues; and a topographical sketch of the Tioga River from Presho to Lindley near the Pennsylvania border, containing preliminary estimates and calculations and apparently made/used in the field.

A significant key to understanding these records is provided by a copy of the written report which is their end product. It contains copies of many of the original diagrams found in the series, and provides explanations on work methodology and results. The report includes background information on the history of the Chemung Canal; an annotated topographic map of the project (scale 1" to 1 mile); a blueprint copy of the profile of the canal route; details of work methods/preparation of the survey, borings, maps, diagrams, and computations on quantity of excavations; and a narrative on water supply, size of locks and prism, seasonal cargo capacity, runoff levels, water storage, and other issues.

The majority of maps and other graphic representations in the series are hand drawn in colored inks on paper or architect's linen. Several are tracings and there are three blueprint copies. Profiles are drawn on cross section graphing paper. Scale is often given, but varies with the document; for profiles both vertical and horizontal scales are given. Almost all have specific titles and some of the diagrams have legends. Document sizes also vary; the smallest ones are diagrams 28 x 20 cm and the largest one is a blueprint 107 x 147 cm.

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Other Finding Aids

Available at Repository

There is an index in the front of volume 1 of the "Reference Copy of Estimate Chemung Canal Survey."

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Use of Records

Access Restrictions

There are no restrictions regarding access to or use of this material.

Access Terms

- Diagrams
- Chemung County (N.Y.)
- Estimates

- Plans (orthographic projections)
- Profiles
- Maps (documents)
- New York (State)
- Canals--Design and construction--Costs
- New York State Barge Canal System (N.Y.)
- Maintaining infrastructure
- Chemung Canal (N.Y.)
- Schuyler County (N.Y.)
- Constructing canals
- Catharine Creek (N.Y.)
- Montour Falls (N.Y.)
- Blueprints
- Reports
- Canals--New York (State)
- Estimating canal construction
- Manuscript maps
- Fall Creek (Cayuga County and Tompkins County, N.Y.)
- Canals--Design and construction
- New York (State). Department of Transportation
- Burns, Louis A.