

Finding Aid to the Fargo Water Treatment Plant Records

Fargo Water Treatment Plant

Fargo Water Treatment Plant Records, 1911-1993

19 linear ft.

Collection number: Mss 209

Oversize Collection 2

[History](#)

[Scope and Content](#)

[Box and Folder List](#)

OVERVIEW

Links: Finding Aid to the [Fargo Water Treatment Plant Photograph Collection](#)

Access: The collection is open under the rules and regulations of the Institute.

Provenance: Donated by Fargo Water Treatment Plant through contract with Bear Creek Archeology, Inc., 1997 (Acc. 2538).

Property rights: The Institute for Regional Studies owns the property rights to this collection.

Copyrights: Copyright is held by the State of North Dakota.

Citation: [Identification of item]. Fargo Water Treatment Plant Records, MS 209, Institute for Regional Studies, North Dakota State University, Fargo.

HISTORY

In 1911-1912 the City of Fargo planned and built one of the nation's earliest municipal water softening and filtration plants to treat water pumped from the Red River of the North. The plant's genesis was marked by controversy, partly the result of city politics, but also from the rapidly changing technology of drinking water purification. The facility was designed by Fargo City Engineer, Frank L. Anders, in collaboration with C. Arthur Brown and others. The plant probably represented the most important municipal improvement the city had

undertaken up to that time. Although the construction came in over budget and was completed somewhat later than planned, the pumps, filters, controls, and mains worked more or less as designed.

The historic Fargo Water Treatment Plant occupied a tract bounded by the Red River, Thirteenth Ave. South, Fifth Street South, and Fourteenth Avenue South. Originally built in rural surroundings on the outskirts of town, by the late twentieth century it became part of an extensive residential neighborhood. The facility resembled a picturesque park with its massive, tile-roofed buildings and manicured lawn dotted with shade trees. The plant was a complex of buildings and structures, the most prominent of which was the Filter House and the Pump House. The main buildings were well-disciplined examples of City Beautiful Classicism.

Over the years the plant saw other buildings added to meet the needs of the city of Fargo and its growing population. In 1972 the plant was modernized and increased its capacity from twelve million gallons a day to thirty-seven gallons a day. In 1992 Fargo proposed to construct a new water treatment plant with a capability in excess of thirty million gallons per day, at a site adjacent to the old plant complex. The project was approved and received partial federal funding. The new plant was completed in 1997 and the old plant buildings were demolished in 1998.

(Excerpts from Historic Documentation of the Fargo Water Treatment Plant, Fargo, North Dakota)

SCOPE AND CONTENT

Because the old plant was partially funded with federal funds, the plant's historical and architectural significance had to be considered as part of the planning process. Using the National Register of Historic Places eligibility criteria, the old plant was determined significant by the North Dakota State Historic Preservation Office. After consulting with the federal Advisory Council on Historic Preservation, a binding memorandum of agreement between the North Dakota State Historic Preservation Office and the City of Fargo was signed spelling out the plan for mitigating the adverse effect of the new plant project on the old plant historic property. The City of Fargo was allowed to demolish the old plant buildings after taking appropriate steps to mitigate the cultural resources impact. These steps included: assembling and conserving current and historical plans, drawings, photographs, and other old plant records; to prepare a narrative history of the facility; to develop a historical exhibit on the old plant to be incorporated into the new plant design; and to produce a video documentary on the history of the city's water works.

In January 1995, the city contracted with Bear Creek Archeology, Inc., Cresco, Iowa, to serve as the city's historical consultant. Prairie Public Television was selected to produce the video documentary. The Institute for Regional Studies agreed to be the repository for the plant records. The gathering, inventorying, organizing, processing, and archival boxing of the collection was done by Bear Creek Archeology. The completed collection was deposited at the Institute in 1996 by Bear Creek Archeology staff along with a copy of *Historic Documentation of the Fargo Water Treatment Plant, Fargo, North Dakota* (Cresco, Iowa: Bear Creek Archeology, 1995) and available at the Institute (Call number: TD225.F3V63 1995). This book contains the "Inventory of Old Plant Archives" as appendix C and which is also the same as the Box Listing in this finding aid. Their catalog numbers 1-150 were used for the photographs in the collection. They have been removed from the collection and processed as a separate collection in the Institute's photograph collections (Photo 2066).

Except for the photographs, the records of the water treatment plant have been kept in exactly the same order as developed by Bear Creek Archeology. The concept of series was not used by Bear Creek, but Institute staff has added series headings where appropriate. Series identified and used in the Contain Listing include: Log books, Daily chemical reports, Operator books, Chemical books, Bacteria books, Low service pump records, Fecal verification records, Daily temperature records, Inventory books, Architectural drawings, Manuals, drawings and correspondence, Monthly reports, Fargo annual reports, and Subject files. For a number of files, archival

photocopies of the contents were also found. The copies are located at the end of the collection, and “(Archival)” was added to the original file title.

Most of the series are relatively clear as to content by their title and are remarkably complete. As is noted in the contents listing, the most recent records in several series are in use today and have been retained at the new water treatment plant.

The [Log Book Series](#) span from 1912 to 1992 and were kept by the Superintendent. They include weather information, chemicals added to the water, chemicals received, and general notes. Much of this data is compiled and condensed into the monthly reports, found in the Monthly Reports Series. Some of the information was taken from other internal records. These log books are no longer maintained.

The [Daily Chemical Reports Series](#) spans from 1972 to 1994 and the data is still kept today. They list chemicals and amounts used, and number of gallons treated. The lower number is the amount of filter back-wash water. Also given is the fee rate in parts per million for the chemicals.

The [Operator Books Series](#) spans from 1987 to 1995 and is kept by the plant operator. They record weather data, amount and types of chemicals added, and changes in dosages. Some of the data is transferred to the log books. This record is still kept today.

The [Chemical Books Series](#) covers the period 1981 to 1994 and were kept by the lab technician. These notebooks give various readings and chemical levels of the water from incoming water and through the cleaning process.

The [Bacteria Books Series](#) covers 1948-1949 and then a large gap until it begins again in 1981. They document tests done by the chemists on the coli form bacteria. Usually ten such tests were done daily as the water was being processed.

The [Low Service Pump Records Series](#) documents the meter readings of the amount of water taken into the plant from the Red River by each pumps from 1989 to 1992.

The [Fecal Verification Record Book Series](#) documents the results of bacterial tests done on water at the waste treatment plant. They cover from 1985 to 1992.

The [Daily Temperature Records Series](#) cover from 1987 to 1994 and give time of day reading taken and the temperature. These were kept by the water treatment plant chemist.

The [Inventory Books Series](#) cover from 1974 to 1993 and document the amount of chemicals on hand at the plant and the water used at the plant in the water treatment process. A substantial amount of water is needed in the actual running of the plant.

The [Architectural Records and Drawings Series](#) includes all oversize drawings and architectural records regarding the plant, and are placed in Oversize collection 2. The finding aid groups the material as found at the plant. Each separate packet is itemized in detail. The primary architectural drawings for the construction of the plant are in the D29 section and were not assigned file numbers by Bear Creek Archeology. This series is a very good detailed record of the initial construction and later changed and additions to the plant. Files labeled 225 to 252 were never received by the Institute, but the listing has been retained for reference purposes.

Since the original order of the contents was retained, the [Subject File Series](#) is found in several sections of the contents listing. They contain a very wide array of material and do not appear to be organized in any particular order; the order actually appears to be in the order the material was found and processed. Thus, finding specific items in this series may entail scanning the entire series. The records afford a wonderfully detailed view of the

construction and operation of the Fargo Water Treatment Plant. The records likely are some of the most detailed such sets of records in the country that are preserved in an archive.

The [Monthly Reports Series](#) consists of the monthly reports compiled by the Fargo Water Treatment Plant covering from 1938 to 1984. The reports from 1985 onward were retained at the new water treatment plant.

The [Fargo, N.D. Annual Reports Series](#) includes the Engineering and Inspections Department annual reports for 1953, 1956-1957, 1969-1960 and 1962. Apparently they changed their name by 1962 which is only listed as the Engineering Department.

The [Publications Series](#) was added to this collection of records in 2009 reflecting a number of publications related to the construction of a new water treatment plant in Fargo and which were not part of the original accession. These publications (folders 1-7) came as part of other donations from Fargo city offices. Additions to this series may occur as related publications are donated to the archives. Consult the Box/Folder listing for publication titles, authors and year of publication.

SEPARATION RECORD

Files 1-150 in the original collection contained the photographic prints and negatives regarding the water treatment plant. They have been organized as Institute Photograph Collection 2061.

BOX AND FOLDER LIST

Box/Folder	Content
1/1	Finding aid, and Historical information
1/151	Log Books Series
1/151-1	Log, July 25, 1912 - Dec. 31, 1914
1/151-2	Log, Jan. 1, 1915 - Oct. 31, 1916
1/151-3	Log, Nov. 1, 1916 - Nov. 30, 1918
1/151-4	Log for year 1919
1/151-5	Log for year 1920
1/151-6	Log for year 1921
1/151-7	Log for year 1922
1/151-8	Log for year 1923
1/151-9	Log for year 1924
1/151-10	Log for year 1925
1/151-11	Log for year 1926
1/151-12	Log for year 1927
1/151-13	Log for year 1928
1/151-14	Log for year 1929
1/151-15	Log for year 1930

1/151-16	Log for year 1931
1/151-17	Log for year 1932
2/151-18	Log for year 1933
2/151-19	Log for year 1934
2/151-20	Log for year 1935
2/151-21	Log for year 1936
2/151-22	Log for year 1937
2/151-23	Log for year 1938
2/151-24	Log for year 1939
2/151-25	Log for year 1940
2/151-26	Log for year 1941
2/151-27	Log for year 1942
2/151-28	Log for year 1943
2/151-29	Log for year 1944
2/151-30	Log for year 1945
2/151-31	Log for year 1946
2/151-32	Log for year 1947
2/151-33	Log for year 1948
3/151-34	Log for year 1949
3/151-35	Log for year 1950
3/151-36	Log for year 1951
3/151-37	Log for year 1952
3/151-38	Log for year 1953
3/151-39	Log for year 1954
3/151-40	Log for year 1955
3/151-41	Log for year 1956
3/151-42	Log for year 1957
3/151-43	Log for year 1958
3/151-44	Log for year 1959
3/151-45	Log for year 1960
3/151-46	Log for year 1961
4/151-47	Log for year 1962
4/151-48	Log for year 1963
4/151-49	Log for year 1964
4/151-50	Log for year 1965
4/151-51	Log for year 1966
4/151-52	Log for year 1967
4/151-53	Log for year 1968
4/151-54	Log for year 1969
4/151-55	Log for year 1970
4/151-56	Log for year 1971
4/151-57	Log for year 1972
4/151-58	Log for year 1973
5/151-59	Log for year 1974

5/151-60	Log for year 1975
5/151-61	Log for year 1976
5/151-62	Log for year 1977
5/151-63	Log for year 1978
5/151-64	Log for year 1979
5/151-65	Log for year 1980
5/151-66	Log for year 1981
5/151-67	Log for year 1982
5/151-68	Log for year 1983
5/151-69	Log for year 1984
5/151-70	Log for year 1985
6/151-71	Log for year 1986
6/151-72	Log for year 1987
6/151-73	Log for year 1988
6/151-74	Log for year 1989
6/151-75	Log for year 1990
6/151-76	Log for year 1991
6/151-77	Log for year 1992

Logs for 1993 and 1994 were retained at the plant.

6/152 **Daily Chemical Reports Series**

6/152-1	Daily chemical report 1/1/1972 through 5/6/1972
6/152-2	Daily chemical report 12/17/1980 through 6/30/1981
6/152-3	Daily chemical report 7/1/1981 through 12/31/1981
6/152-4	Daily chemical report 1/1/82 through 6/30/82
6/152-5	Daily chemical report 7/1/82 through 12/1/82
6/152-6	Daily chemical report 12/1/82 through 4/30/83
6/152-7	Daily chemical report 5/1/83 through 9/24/83
6/152-8	Daily chemical report 9/25/83 through 2/20/84
6/152-9	Daily chemical report 2/21/84 through 7/23/84
6/152-10	Daily chemical report 7/24/84 through 12/13/84
6/152-11	Daily chemical report 12/14/84 through 5/15/85
6/152-12	Daily chemical report 5/16/85 through 10/14/85
6/152-13	Daily chemical report 10/15/85 through 3/15/86
6/152-14	Daily chemical report 3/16/86 through 10/12/86
6/152-15	Daily chemical report 10/13/86 through 1/13/87
6/152-16	Daily chemical report 1/14/87 through 6/17/87
6/152-17	Daily chemical report 6/18/87 through 10/27/87
6/152-18	Daily chemical report 10/28/87 through 4/30/88
6/152-19	Daily chemical report 5/1/88 through 10/1/88
6/152-20	Daily chemical report 10/1/88 through 2/28/89
6/152-21	Daily chemical report 3/1/89 through 7/31/89
7/152-22	Daily chemical report 10/1/89 through 12/31/89

7/152-23 Daily chemical report 1/1/90 through 5/26/90
 7/152-24 Daily chemical report 5/27/90 through 10/28/90
 7/152-25 Daily chemical report 10/29/90 through 3/31/91
 7/152-26 Daily chemical report 4/1/91 through 8/31/91
 7/152-27 Daily chemical report 9/1/91 through 1/31/92
 7/152-28 Daily chemical report 2/1/92 through 6/30/92
 7/152-29 Daily chemical report 7/1/92 through 11/30/92
 7/152-30 Daily chemical report 12/1/92 through 4/30/93
 7/152-31 Daily chemical report 5/1/93 through 9/30/93
 7/152-32 Daily chemical report 10/1/93 through 12/31/93
 7/152-33 Daily chemical report 1/1/94 through 4/30/94
 7/152-34 Daily chemical report 5/1/94 through 8/31/94

7/153 **Operator Books Series**

7/153-1 Operator book 11/28/87 through 8/29/88
 7/153-2 Operator book 9/1/88 through 4/26/89
 7/153-3 Operator book 4/28/89 through 12/29/89
 7/153-4 Operator book 12/30/89 through 1/6/91
 7/153-5 Operator book 1/7/91 through 9/1/91
 7/153-6 Operator book 9/2/91 through 6/24/92
 7/153-7 Operator book 6/25/92 through 3/8/93
 7/153-8 Operator book 3/9/93 through 10/20/93
 7/153-9 Operator book 10/21/93 through 6/8/94
 7/153-10 Operator book 6/9/94 through 1/18/95

7/154 **Chemical Books Series**

7/154-1 Chemical book 2/12/81 through 5/4/82
 7/154-2 Chemical book 5/6/82 through 11/15/83
 7/154-3 Chemical book 11/17/83 through 5/23/85
 7/154-4 Chemical book 5/27/85 through 11/24/86
 7/154-5 Chemical book 11/26/86 through 5/19/88
 7/154-6 Chemical book 5/20/88 through 12/28/88
 7/154-7 Chemical book 8/8/89 through 3/16/90
 7/154-8 Chemical book 10/26/90 through 5/9/91
 7/154-9 Chemical book 11/26/91 through 2/11/93
 7/154-10 Chemical book 2/15/93 through 3/10/94

7/155 **Bacteria Books Series**

7/155-1 Bacteria book October 1948 - September 1949
 7/155-2 Bacteria book 12/25/81 through 5/3/84
 7/155-3 Bacteria book 1/4/88 through 2/13/90

7/155-4 Bacteria book 2/14/90 through 7/10/92
 7/155-5 Bacteria book 7/13/92 through 9/12/94

7/156 **Low Service Pump Records Series**

7156-1 Low service #1, April 1989 - April 1992
 7/156-2 Low service #2, April 1989 - April 1992
 7/156-3 Low service #3, April 1989 - April 1992

7/157 **Fecal Verification Record Books Series**

7/157-1 Fecal verification 8/28/85 through 11/7/90
 7/157-2 Fecal verification 11/19/90 through 12/17/92

8/158 **Daily Temperature Records Series**

8/158-1 Daily temperature record 12/23/87 through 8/23/90
 8/158-2 Daily temperature record 9/3/90 through 6/24/92
 8/158-3 Daily temperature record 6/25/92 through 4/15/94

8/159 **Inventory Books Series**

8/159-1 Inventory book 8/1/74 through 11/1/76
 8/159-2 Inventory book 12/1/76 through 10/1/80
 8/159-3 Inventory book 8/1/84 through 9/30/87
 8/159-4 Inventory book 10/1/87 through 11/30/90
 8/159-5 Inventory book 12/1/90 through 9/30/93

Subject Files Series

17/160 Visitor's register for Water Purification Plant; first date is 1929; Herbert Hoover's undated signature appears between November 16-25, 1929
 8/161 4/14/33 invoice from Allis-Chalmers Mfg. Co. for pumps, etc.
 8/162 3/6/63 invoice from Geo. E. Haggart, Inc. for pipe; letter clipped to it dated 10/2/62
 8/163 Group of carbon copies of bills sent by city water department to assorted individuals, companies and agencies; all dated from 1954-1972
 8/164 Group of 1970-71 invoices from Cutler-Magner Co. of Duluth for lime
 8/165 Group of personal notes and calculations, probably from the 1950s
 8/166 Personal notes, etc. from Ora C. Ayliff; probably 1940s
 8/167 Two drawings of water mains
 8/168 Undated gauge readings from "new lime slaker and sodium aluminate feed"
 8/169 Typed manuscript "Geared Ball Bearing Floor Stand to Operate 36' x 36" Sluice Gate Made from Old Truck Differential," by Medlicot and Behlmer
 8/170 "Public Relations," by K. Ruby; one copy is handwritten, the other is typed and appears

- to be missing one or pages at the end
- 8/171 Mimeograph copies of Fargo general fund statements, ca. 1963-65
 - 8/172 Mimeograph copy of water rate comparisons between North Dakota towns, from the chamber of commerce
 - 8/173 Meeting agendas (5/21/64 and 11/17/64) with handwritten notations
 - 8/174 Mimeograph copy of manuscript "Advanced Hydraulics Specifications"
 - 8/175 12/29/63 resolution regarding city water rates
 - 8/176 5/1/44 contract w/ Consolidated Materials Co. of Duluth (Archival copies)
 - 8/177 1/1/41 contract w/ Marblehead Lime Co., Chicago (Archival copies)
 - 8/178 1/1/41 contract w/ Cliffs Dow Chemical Co., Marquette, Michigan (two copies) (Archival copies)
 - 8/179 Two copies of contract(s?) dated 11/24/36, 12/31/37 and 12/31/40 w/ C.B. Lyon and Bro., Inc., St. Paul (Archival copies)
 - 8/180 5/20/41 contract w/ Linde Air Products Co. (Archival copies)
 - 8/181 4/9/41 contract w/ Neptune Meter Co., Chicago (Archival copies)
 - 8/182 1/2/39 contract w/ Columbia Alkali Corp., Barberton, Ohio (Archival copies)
 - 8/183 Three copies of contract(s?) dated 12/5/32, 11/27/33, 11/27/37, 12/10/37 and 12/14/37 w/ Mathieson Alkali Works, Inc., New York (Archival copies)
 - 8/184 1/8/41 contract w/ Fargo Iron & Metal Co., Inc. (Archival copies)
 - 8/185 1/22/42 contract w/ Nash Engineering Co., South Norwalk CT (Archival copies)
 - 8/186 Contract(s?) dated 4/16/40, 1/21/41 and 8/15/41 w/ International Filter Co., Chicago (Archival copies)
 - 8/187 Contract(s?) dated 2/9/35 and 12/9/35 w/ Thompson Hayward Chemical Co., Kansas City Missouri (Archival copies)
 - 8/188 Contract(s?) dated 1924-1936 w/ Electro Bleaching Gas Co., New York (Archival copies)
 - 8/189 Fargo Water Works Department reports, 1931-1940 (Archival copies)
 - 8/190 Monthly Filtration Plant reports, Jan.-Dec. 1938 (Archival copies)
 - 8/191 Printed booklet "Report of the City Engineer 1910-1912," by F.L. Anders
 - 8/192 Accountant's report for Fargo sewage system, 7/1/55 through 3/31/59 (Archival copies)
 - 8/193 "Report on Water Rates, Municipal Water System, Fargo, ND," by Black & Veatch, Kansas City, 1948
 - 8/194 "Report on Cost of Service of Municipal Water System, Fargo, North Dakota," by Black & Veatch, 1953
 - 8/195 Contract Documents, Notice to Bidders, Contract No. 11, Lime Handling Facilities; 1959
 - 8/196 Miscellaneous maps and plans: n.d. (2), 1923, 1937, 1942 and 1947 (Archival copies)
 - 8/197 Dates of installation and tests completed of electric pumps at pump plant (Archival copies)
 - 8/198 Table, "High Water, Red River at Fargo"; clipped to page of information on electric motor load at water works (Archival copies)
 - 8/199 Chart, "No Flow Over Dam No. 1" (Archival copies)
 - 8/200 "Total Hydrants in Use", dated 1/1/42 (Archival copies)
 - 8/201 "Water Works Historical Overview" on H. H. Behlmer (Superintendent) letterhead, undated handwritten mss. (Archival copies)
 - 8/202 "Report on Water Production Facilities, Fargo, North Dakota," by Black and Veatch, 1945

- (Archival copies)
- 8/203 Miscellaneous reports to city manager from water treatment plant, 1947, 1948, 1950, 1952, 1955 and 1958
 - 8/204 Hand-drawn table, "City Well No. 1"; 1941-1949
 - 8/205 Results of Employees' Advisory Committee elections
 - 8/206 Tundated hydrant rental charge notes from O. C. Ayliff
 - 8/207 "Engineering Service Agreement, Fargo Filtration and Pumping Plant" plus associated graphs and tables, 3/10/70
 - 8/208 Completed, undated Position Classification Questionnaire for C. Gorthy; map clipped to this (association unclear)
 - 8/209 Resolution prescribing rates and charges; some notations, 1955
 - 8/210 Misc. notes and diagrams; n.d., 1956 and 1960
 - 8/211 "Notice to Bidders, Additions and Alterations to Water Treatment Plant", 1949
 - 8/212 "Notice to Bidders, Contract No. 3, New Low Service Pump and Supply Line", 1954
 - 8/213 "Notice to Bidders, Contract No. 2, New Low Service Pump and Supply Line," 1953
 - 8/214 "Notice to Bidders, Contract No. 4, Water Plant Switch Gears Installation" and associated plans and correspondence, 1955
 - 17/215 Tables showing 1970-1971 municipal agencies' funding information
 - 17/216 Group of physical inventories; n.d. (handwritten), 1966, 1968, 1969, 1970, 1971 & 1972
 - 17/217 "Comparison of Water Rates in North Dakota Cities and Villages, August 1950 and June 1954," by ND Agricultural College Social Science Dept. in cooperation w/ the League of North Dakota Municipalities; Special Bulletin No. 10, August 1954
 - 17/218 Proposed amendment to city plumbing code, 1959

Architectural Records and Drawings Series (Oversize Collection 2)

- Oversize** Fargo Filtration Plans—
- 2.1 Settling basin /Clear well, by Robert Jacobson, 1924 [10 sheets]
 - Construction of mixing chamber, by W.P. Gabeu, 1930 [2 sheets]
 - Addition to filter house, by W.P. Gabeu, 1931 [7 sheets]
 - 2.2 Lighting station, by F.A. Anders, 1911 [1 sheet]
 - Line from lift pump mixing chamber, by F.A. Anders, 1911
 - Filters equipment, 1932 [4 sheets]
 - Addition to head house, by W.P. Gabeu, 1931 [7 sheets]
 - Addition to filter house, by W.P. Gabeu, 1931 [8 sheets]
 - Equipment to be removed from old filter beds, by W.P. Gabeu, 1933 [1 sheet]
 - New air system, by W.P. Gabeu, 1933 [1]
 - Detail of filter beds, by W.P. Gabeu, 1933 [1 sheet]
 - Operating tables, by W.P. Gabeu, 1933 [1 sheet]
 - Manifold system, by W.P. Gabeu, 1933 [1 sheet]
 - Elevator shaft, by W.P. Gabeu, 1932 [1 sheet]
 - 2.3 Pumping plant and lift station, by F.A. Anders, 1911 [20 sheets]
 - Elevations of buildings, by F.A. Anders, 1911 [17 sheets]
 - Purification plant and pumping station, by F.A. Anders, 1911 [9 sheets]

- Detail of mixing baffles, by F.A. Anders, 1911
 - East elevation
 - Clear wells
- 2.4 Plan of filters
- 2.5 Chemical tank drawings (8 sets)
- 2.6 Coagulating basin (4 sets)
- 2.7 Air ducts and manifold system (6 sets)
- 2.8 Additions to filter house, 1931
- 2.9 Piping
- 2.10 Dam on Red River (3 sets)
- 2.11 General drawings (22 sets)
- 2.12 *Fargo Water Works, Fargo, N.D. Pumping Plant and Lighting Station* drawings, 1911, by F.A. Anders, Engineer, [27 sheets]
- 2.13 *Fargo Water Works, Fargo, N.D. Pumping Station and Lighting Station* drawings, 1911, by F.A. Anders, Engineer, [26 sheets]
- 2.14 *Fargo Water Works, Fargo, N.D. Filtration Plant* drawings, 1911, by F.A. Anders, Engineer, [Sheets, 2-39 and 51, plus 10 unnumbered sheets]
- 2.15 *Operating Design, Filtration Plant and Pumping Station*, by H.H. Behlmer, May 14, 1931, Rev. Jan. 2, 1947 [1 sheet]
- 2/16 *Fourth St. S. at Footbridge*, by City Engineer, 1929-1930
- 2.17 *Proposed Filter Plant for the City of Fargo, N.D.*, by Norwood Engineering Co., Florence, Mass., 1911 [30 sheets: blueprints]
- 2.18 *Fargo Plumping Plant and Lighting Station, Fargo, N.D.*, by F.A. Anders, 1911, [20 sheets]

Box Subject Files Series

- 9/253 Notice to Bidders Contract #9 1958, revised 1964, correspondence and plans
- 9/254 Manuals, plan drawings and asst. correspondence for high service pumping equipment Contract #9 1966 "Allis Chalmers"
- 9/255 Misc. care, maintenance and operation manuals
- 9/256 Manuals, plan drawings, and associated correspondence: Project #28-77, G-10-1 ("Reservoir S??? Drawings" -original folder label)
- 9/257 Misc. plan drawings and correspondence, 1966 ("Switch Gear General Electric" -original folder label)
- 9/258 Cylinder Tests, 1965
- 9/259 Subsurface Investigations for Lime Storage Facilities, 1957
- 9/260 Correspondence, plans and manuals for lime handling facilities, Contract #11, 1965, 1966
- 9/261 Correspondence and plans for W.S. Nott Co. equipment, 1965
Contents of folder labeled "Contract #10"
- 9/262-1 Estimate Contract #10 District 3166, 1966
- 9/262-2 Daily Diary—Reservoir, 1965
- 9/262-3 Water Reservoir, Contract #10, Concrete Work, 1965
- 9/262-4 Reinforcing Steel, Contract #10, 1965
- 9/262-5 Castings, 1965

- 9/262-6 Misc. Metal, 1965
- 9/262-7 Piping, 1965
- 9/262-8 Valves, 1965
- 9/262-9 Approved Drawings, Contract #10, Misc., 1965
- 9/262-10 Reservoir—Electrical, 1965
- 9/262-11 City Furnished Items, 1965, 1966
- Contents of folder labeled “Contract #11”
- 9/263-1 Estimates, Contract #11, District 3167, 1965, 1966
- 9/263-2 Daily Diary, Contract #11, Lime Handling, 1965
- 9/263-3 Concrete Work, Contract #11, 1965
- 9/263-4 Reinforcing Steel, Contract #11, 1965
- 9/263-5 Windows and Doors, 1965
- 9/263-6 Electrical, 1965
- 9/263-7 Lime Handling Facilities, 1965, 1966
- 9/264 “The Saga of Fargo Waterworks” (n.d.)
- 9/265 Autographed copy of “The Water Purification Plant at Fargo, North Dakota,” by Frank L. Anders
- 9/266 Misc. General Electric Switch Gear manuals
- 9/267 Climax Parts Book Model V80-V85, ca. 1966
- 9/268 Climax Instruction Book and V-Series engines, ca. 1966
- 9/269 Contract #4 Notice to Bidders, 1955
- 9/270 Contract #2--New Low Service Pump and Supply Line Notice to Bidders, 1953
- 9/271 Instructions for Switch Gear, GE
- 9/272 High Water, Red River at Fargo, ND 1916-1947 (Archival copies)
- 9/273 Memorandum on Test Hole Drilling in Fargo/Moorhead Area (n.d.)
- 9/274 Correspondence and literature for water carbon specs, 1971
- 9/275 Misc. plan drawings and maps, 1939, 1945, 1968, 1949
- 9/276 Misc. time sheets (unknown dates) and employee work hour notes written, file folders, (???) early 1950s
- 10/277 Pumping Plant reports 1968-1979
- 10/278 City of Fargo Water Dept. statements of revenue and expenses and earnings statement 1959-1967
- 10/279-1 Misc. manuals
- 10/279-2 Zeiss manual (in German)
- 10/279-3 Sanitary pit (privy) articles by State Dept. of Health (n.d.)
- 10/280 Water Works fiscal appropriations, (1944, 1946) and operation and maintenance costs, 1940-1942 (Archival copies)
- 10/281 “Water Works Management and Administration in North Dakota,” by O. C. Ayliff
- 10/282 Water Dept. Fiscal Report 1954-1958
- 10/283 Misc. correspondence, budget reports and payroll information and chemical information (misc. dates, 1940-1959) (Archival copies)
- 10/284 Water Works budgets and budget estimate for 1947-1950
- 10/285 Correspondence and receipts for Elevated Storage Tank No. 2, 1955-1957
- 10/286 Correspondence, specifications and bids for chain link fence around water works, 1957

- 10/287 John T. Jones Construction Co., billings for 1956-1957
- 10/288 Correspondence, plans and receipts for raw water line, 1955
- 10/289 Plans and specifications for garage addition, 1956
- 10/290 Correspondence, drawing and manual for Chapman Valve Mfg. Corp., Indian Orchard, MA, 1955
- 10/291 Tank #4 Paint Spray Damage
- 10/292 Instructions for Bidders and correspondence—slurry type basin equipment, 1949
- 10/293 Misc. drawings of switch gear, 1951-1955
- 10/294 Misc. contracts and correspondence, 1944-1947
- 10/295 Correspondence and drawings for improvements to Filtration Plant, 1950
- 10/296 Correspondence for basin equipment, Filtration Plant, 1950
- 10/297 Correspondence and contract documents for slurry type basin equipment, 1949
- 10/298 Switch gear installation plans and manuals, 1955
- 10/299-1 Misc. cover letters and plans, 1950
- 11/299-2 Misc. cover letters and plans, 1950
- 11/299-3 Misc. cover letters and plans, 1950
- 11/300 Misc. drawings, undated
- 11/301 Instruction manuals for Hellige Turbidimeter
- 11/302 Deposition for Condemnation Proceedings, 1972
- 11/303 Wash water drain line specifications, drawings and correspondence, 1950-1951
- 11/304 Installation misc. manuals and receipts, 1950
- 11/305 Misc. correspondence and manuals, 1950
- 11/306 Misc. manuals and materials list, 1950
- 11/307 Public Utilities Committee Outline of minutes, 1950
- 11/308 Automatic Sprinkler Connections, undated
- 11/309 Notes, invoice plans and correspondence for Red River Dam and Intake, 1930 (Archival copies)
- 11/310 Notes, plans and correspondence for Head House, 1931 (Archival copies)
- 11/311 Notes, plans and correspondence for Filtration Plant, 1924 (Archival copies)
- 11/312 Drawings and notes for Low Lift Pump, 1932 (Archival copies)
- 11/313 Notes and drawings for reconstruction of Water Works, 1930 (Archival copies)
- 11/314 Drawings, notes, correspondence and billing info for High Lift, 1933 (Archival copies)
- 11/315 Misc. maps and correspondence associated with Village of North Fargo, Supreme Court Litigation, 1920-1923
- 11/316 Correspondence and plans for removal of chemical tanks, 1932 (Archival copies)
- 11/317 Plans, charts and correspondence for CO² softener, 1933 (Archival copies)
- 11/318 Plans, manual and correspondence for Allis-Chalmers centrifugal pumps (Archival copies)
- 11/319 Correspondence, specifications and drawings to re-equip six filter beds (Archival copies)
- 11/320 Correspondence, drawings and specifications for filter addition, 1931 (Archival copies)
- 11/321 Drawings, specification and manuals for equipment of filters, 1933 (Archival copies)
- 11/322 Notes, manuals, drawings and specifications for electrification of Elevator Shaft, 1932 (Archival copies)
- 11/323 Plans and specifications for 18" suction line, 1922 (Archival copies)
- 11/324 Plans and correspondence for chemical feed machines, 1920, 1955, 1918 and 1933 (Archival copies)
- 11/325 Plans and correspondence for electric panel floor, 1934 (Archival copies)

- 12/326 Correspondence and plans for Pump Plant ceiling, 1934
- 12/327 Correspondence, manual and plans for Fairbanks-Morse Low Service Pump, 1933
- 12/328 Misc. plans for Job 156
- 12/329 Plans, correspondence and notes associated with Allis-Chalmers equipment, 1921-1924
- 12/330 Drawings and correspondence for 18" discharge main, 13th Ave. pumping station to 10th St., 1914
- 12/331 Profile of river bottom at intake to Filter Plant
- 12/332 Notes, drawings and specifications associated with Allis-Chalmers, 1927, 1929, and 1959
- 12/333 Drawings and specifications for warehouse and cool room at Water Works, 1941
- 12/334 Plans, notes and receipts for Water Works construction, 1929
- 12/335 Notes, drawings and correspondence for 100,000 gal. tank, 1932, 1938
- 12/336 Notes, specification and drawings for North Fargo Tank, 1938
- 12/337 Golden Anderson Automatic Valve Data Catalog, 1928
- 12/338 Notes, correspondence and specifications for 500,000 gal. elevated tank, 1938
- 12/339 Notes and drawings associated with 13th Ave., 4th St. and 5th St. South
- 12/340 Notes and drawings for river survey, 1932-1933
- 12/341 Drawings, charts and specifications for 500,000 gal tank, 1932
- 12/342 Drawings and notes for Dam #1, 1921
- 12/343 Notes and correspondence for dam and intake, 1930, 1956
- 12/344 Notes, correspondence, drawings and manuals associated with dike and Pump Station, 1959
- 12/345 Misc. manuals and correspondence
- 12/346 Pamphlet: "Facts About Fluoridation"
- 12/347 Work injuries in water supply utilities, 1953

12/348 **Manuals, drawings and correspondence Series**

- 12/348-1 A and B
- 12/348-2 C
- 12/348-3 E
- 12/348-4 F
- 12/348-5 G
- 12/348-6 H
- 12/348-7 I
- 13/348-8 J
- 13/348-9 K
- 13/348-10 L
- 13/348-11 M
- 13/348-12 N
- 13/348-13 O
- 13/348-14 P
- 13/348-15 Q
- 13/348-16 R
- 13/348-17 S
- 13/348-18 T
- 13/348-19 U

13/348-20 V
 13/348-21 W
 13/348-22 X
 13/348-23 Y
 13/348-24 Z

Subject Files Series

13/349 Manuals and notes for Iron Fireman Boiler, 1963
 13/350 Misc. manuals, warranties and correspondence, ca. 1950s, 1960s
 13/351 Robbins and Myers Electric Hoist, 1952
 13/352 Lawnmower and Rainmaker sprinkler instructions
 13/353 Manual and instructions for sump pump, 1958
 14/354 Nalco Co. and Flox Co. correspondence, 1935, 1944, 1946, 1936, 1938
 14/355 Nalco/Flox service reports, 1937, 1961
 14/356 Dry feed chemical apparatus, 1920
 14/357 Instruction booklets for cell transmitter, recording pneumatic receiver, Pendvane Flowmeter, Curtis Air Compressor, and Nash Engineering Co. pump
 14/358 Instructions for lime feeder and slaker, 1947
 14/359 Misc. drawings, instructions and correspondence, Infilco and International Filter Co.
 14/360 Instructions for Venturi tube, 1929
 14/361 Instructions for Simplex Meter type MO (n.d.)
 14/362 Instructions for Wallace & Tiernan Chlorine Control Apparatus, 1930
 14/363 Directions for granimetric feeder time cycle control
 14/364 Direction, asst. Simplex Control meters, 1921, 1938, 1922, and 1929
 14/365 Directions, Builders Providence Equipment, 1954
 14/366 Directions for Walker Process Equipment, 1962
 14/367 Instruction, Wallace & Tiernan equipment, 1940, 1952, 1947, 1929, 1964, and 1961
 14/368 Smith Welding Equipment, 1949
 14/369 Plans, correspondence for Cleaver-Brook Oil Burner, 1954
 14/370 Instructions for Republic flow meters, 1950, 1933
 14/371 Misc. sewage disposal service charge material, 1932
 14/372 Instructions for Infilco lime feeder and slaker, 1951
 14/373 Public sewerage systems (minimum standards for), 1938
 14/374 Agreement of posting approved water signs (n.d.)
 14/375 Water supply and sewerage systems for municipalities, 1936
 14/376 Misc. instructions (n.d.), notes (1927), and receipts (1952)
 14/377 Correspondence, specifications and manual for excavation equipment tractor, 1956
 14/378 N.D. water and sewage salary surveys, 1963
 14/379 Misc. plant history
 14/380 Correspondence and misc. water system reports to the City of Fargo, late 1940s and 1960s
 14/381 Misc. receipts, 1948, 1951, 1947, 1946, 1938, 1939, 1940, 1941
 14/382 Manual of Emergency Water and Sewage Service, Fargo (n.d.)
 14/383 Water Dept. misc. balance sheets and revenue statements, 1966

- 14/384 Misc. reports, chemical tests, water works budgets, 1951, 1952, 1956, 1947, 1946, 1948, 1949, 1958, 1944
- 14/384a Chemicals Received & Cost, 1913-1918; Chemicals on Hand, 1913-1918; and other chemical listings, 1919-1920

- 14/385 **Monthly Reports Series**
(Years 1985-1995 (385-1 to 385-11) removed and left at water plant)

- 14/385-12 1984 monthly reports
- 14/385-13 1983
- 15/385-14 1982
- 15/385-15 1981
- 15/385-16 1980
- 15/385-17 1979
- 15/385-18 1978
- 15/385-19 1977
- 15/385-20 1976
- 15/385-21 1975
- 15/385-22 1974
- 15/385-23 1973
- 15/385-24 1972
- 15/385-25 1971
- 15/385-26 1970
- 15/385-27 1969
- 15/385-28 1968
- 15/385-29 1967
- 15/385-30 1966
- 15/385-31 1965
- 15/385-32 1964
- 15/385-33 1963
- 15/385-34 1962
- 15/385-35 1961
- 15/385-36 1960
- 15/385-37 1959
- 15/385-38 1958
- 15/385-39 1957
- 15/385-40 1956
- 15/385-41 1955
- 15/385-42 1954
- 15/385-43 1953
- 15/385-44 1952
- 15/385-45 1951
- 15/385-46 1950
- 15/385-47 1949

15/385-48	1948
15/385-49	1947
15/385-50	1946
15/385-51	1945
15/385-52	1944
15/385-53	1943
15/385-54	1942
15/385-55	1941
15/385-56	1940
15/385-57	1939
15/385-58	1938

Fargo, N.D. Annual Reports Series

15/386	Fargo Engineering Dept. Annual Report, 1962
15/387-1	Engineering and Inspection Annual Report, 1960
15/387-2	Engineering and Inspection Annual Report, 1959
16/387-3	Engineering and Inspection Annual Report, 1957
16/387-4	Engineering and Inspection Annual Report, 1956
16/387-5	Engineering and Inspection Annual Report, 1953

Subject Files Series

16/388	University of Minnesota Annual School for Waterworks Operators Curriculum, 1942
16/389	Plans, water main system, 1951
16/390	Specifications for Water Works warehouse, 1941
16/391	Misc. maps, water main data, 1941; Engineering Dept. Reports, 1941-1946; specifications for addition to filter house, 1931
16/392	Maps of water mains, 1941
16/393	Misc. manuals, 1928, 1929
16/394	Specifications for storm sewer, 1933
16/395	Water main data, 1957
16/396	Water Dept. balance sheets, 1956-1959
16/397	Misc. land records, 1959-1960
16/398	Fiscal Inventory, 1970, 1971
16/399	Geological and Groundwater Resources Report for the Fargo Area, 1940
16/400	Report on Plant Records (K. Ruby), and report of main leak, 1961
16/401	Garage addition specifications and drawings, by Kurke Associates, 1956
16/402	Notice to bidders, etc. for Contract no. 9, High Service Pumping Equipment, by Black & Veatch, 1958
16/403	Notice to bidders, etc. for Contract no. 11, Lime Handling Facilities, by Black & Veatch, 1959
16/404	<i>Principles of Water Treatment</i> , by Kenneth Ruby
16/405	<i>The Sanitary Landfill in North Dakota</i> , by C.L. Bradley (published in <i>The Sanitarian</i> , Sept/Oct. 1959)

Publications Series

- 18/1 *Final Conceptual Design Document, & Executive Summary*, by Ulteig Engineers & Black & Veatch, 1991
- 18/2 *Fargo, North Dakota Water Treatment Plan Contract No. 1 Design Memorandum*, 1992
- 18/3 *Water Plant Value Engineering Study for Fargo, North Dakota*, by Ulteig Engineers & Black & Veatch, 1991
- 18/4 *Pilot Plant Study Residuals Treatment Facility, Belt Filter Press Pilot Plant Study, Water Treatment Facility, City of Fargo, North Dakota*, by Ulteig Engineers, 1992
- 18/5 *Softening Process Evaluation Report, Water Treatment Plan, Fargo, North Dakota*, by Ulteig Engineers, 1991
- 18/6 *Preliminary Financing Plan, Water Plant Expansion Project, Phases I, II, & III, City of Fargo, North Dakota*, by Evensen Dodge Inc., 1991

Files 226 to 252 not received by the Institute but included in this finding aid for reference purposes
(Apparently retained at new Fargo Water Treatment Plant)

- 226 Contents of large map pocket 13, folder 52: Plant Improvements Black & Veatch 1949
- 227 Contents of large map pocket 13, folder 51: Switch Gear P.P. 1955, Misc. 1950, 1951 (75)
- 228 Contents of large map pocket 13, folder 50: New 24" Feeder Main 1955-1956, Elevated Tanks Found, 1955-1956, W.M. Distribution Map 1953, Contract #4 Switchgear Installation 1955, Contract #5 Water Mains 1954, Contract #8 Water Mains 1954, Contract #7 elevated Tank Foundations and Piping 1955 (31)
- 229 Contents of large map pocket 13, folder 49: Garage Additions 1956, Low Service Line 1954 (3)
- 230 Contents of large map pocket 12, folder 48: Landscaping, Elevated Tanks, Plant Grounds 1958, Fencing 1957, Flow Chart (n.d.) (22)
- 231 Contents of large map pocket 12, folder 47: North Side Fire Station 1952 (7)
- 232 Contents of large map pocket 12, folder 46: Dike Area Flood Control 1958 (2)
- 233 Contents of large map pocket 11, folder 44: Sheyenne River Diversion 1952 2 identical sets of 12 ea. (24)
- 234 Contents of large map pocket 11 folder 43: New Clear Well, Standby Pump, 8 misc. 1951,1958 (26)
- 235 Contents of large map pocket 11, folder 42: Bulk Lime Equipment 1958 4)
- 236 Contents of large map pocket 11, folder 41: W Dept. Maint. Bldg. at Tank No. 3 1959 (9)
- 237 Contents of large map pocket 11, folder 41: Convent Line 1960 (18)
- 238 Contents of large map pocket 10, folder 37: COE Flood Control 1958, Lime Facilities 3 identical copies 1959, (34)
- 239 Contents of large map pocket 9, folder 36: Clear Well 1965-1966 (27)
- 240 Contents of large map pocket 9, folder 35: Township Maps (5)
- 241 Contents of large map pocket 9, folder 34: Pitometer Survey, NBFU 1938,1922 (3)
- 242 Contents of large map pocket 9, folder 33: Sewage Pump Plant and Ponds 1974 (39)
- 243 Contents of large map pocket 8, folder 32: Sludge Building 2 identical copies 1974 (52)
- 244 Contents of large map pocket 8, folder 31: Sludge Handling Equipment W.S. Nott 1975, Lime Handling Equipment 1959 (71)
- 245 Contents of large map pocket 8, folder 30: Water Plant Expansion 1972 (223)
- 246 Contents of large map pocket 8, folder 29: 10th Street Underpass 1937, 1975 (4)

- 247 Contents of large map pocket 7, folder 28: Sheyenne Pumphouse and Pipeline 1983, Emergency Water Supply Pipeline, Emergency Water Supply Pumping Station (80)
- 248 Contents of large map pocket 7, folder 27: Sewage Plant Expansion 1982 (65)
- 249 Contents of large map pocket 1, folder 4: New Water Plant 1993 (13)
- 250 Contents of large map pocket 1, folder 3: High Service Pump Station 1993 (27)
- 251 Contents of large map pocket 1, folder 2: Interim Improvements, State Health Dept. approvals of plans and specs. 1989 (24)
- 252 Contents of large map pocket 1 folder 1: water towers, misc. maps 1932, 1939, 1954, 1972, 1974, 1976, 1977, 1979, 1993 (34)