

Adams Township, MI

White Pine
Project No 35

Presentations
to M. J. Labadie
White Pine

EXPERIENCE RECORD AND WORK PERFORMED

by

SPENCER, WHITE & PRENTIS, INC.
Engineers and Contractors

Adams Township, MI



THE WHITE AND PRENTIS, INC.
ENGINEERS AND CONTRACTORS

NEW YORK

April 27, 1944

Dear Mr. [Name]:

Reference is made to your letter of April 27, 1944.

The enclosed report contains the results of the investigation.

Very truly yours,

The White and Prentis, Inc.
Engineers and Contractors
120 Broadway
New York 5, N.Y.

Enclosure

Very truly yours,
[Signature]

THE WHITE AND PRENTIS, INC.

ENGINEERS AND CONTRACTORS

120 Broadway
New York 5, N.Y.

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Very truly yours,
[Signature]

SPENCER, WHITE AND PRENTIS, INC.

ENGINEERS AND CONTRACTORS

10 EAST 40TH STREET

NEW YORK

TELEPHONE: ASHLAND 4-0650

April 17, 1942

LAZARUS WHITE
PRESIDENT
CHARLES B. SPENCER
VICE PRESIDENT
EDMUND A. PRENTIS, JR.
SECY & CHIEF ENGINEER

PILES
SHAFTS
TUNNELS
FOUNDATIONS
UNDERPINNING
STEEL AND CONCRETE
CONSTRUCTION

Experience Record and Work Performed by

Spencer, White and Prentis, Inc.

Engineers and Contractors

History of the Corporation

This corporation was organized in 1919 and since that time has been actively engaged in the construction business, being particularly concerned with the design and construction of tunnels, shafts, dams, cofferdams, caissons, pile foundations, underpinning, difficult shoring and other heavy construction.

Since 1919 the home office and yard have been maintained in New York City, and since 1923 a branch office and yard have been maintained in Detroit, Michigan.

Spencer, White & Prentis, Inc. has done over \$100,000,000 of work in the United States, some of the major projects being listed below:

Contracts Performed

Tunnels & Subways

Sixth Avenue Subway - 8th to 18th Sts., New York City.....	\$6,800,000.
Eighth Avenue Subway--one-half interest--48th to 56th Streets, New York City.....	6,300,000.
Eighth Avenue Subway--one-half interest--112th to 122nd Sts., New York City.....	4,700,000.
Managing Engineers, Nassau St. Subway, Liberty Street to Municipal Building, New York City.....	4,500,000.
Delaware Aqueduct Tunnel (7 miles of 18' rock tunnel). (We have a 1/4 interest in this job, now 97% complete).	10,000,000.

Dams & Locks

Trempealeau, Wisconsin, on Upper Mississippi River.....	3,030,000.
Alton, Illinois.....	6,088,000.
Red Wing, Minnesota..... (Involved operation of construction camp)	2,320,000.

Deep Foundations

Cleveland Union Terminal, Cleveland, Ohio.....	\$ 1,500,000.
(deepest building foundation in the world)	
Bank of Manhattan Building, 40 Wall St., New York City.....	1,100,000.
Criminal Courts Building, New York City.....	2,500,000.
Warehouse #77, Brooklyn Navy Yard, New York.....	1,200,000.
(1/2 interest with another contractor)	
Beck-Cadillac Hotel, Detroit, Michigan.....	1,500,000.

National Defense

Dry Docks and Appurtenant Works at Norfolk and Philadelphia Navy Yards (1/3 interest in contract which is now 70% complete).....	63,000,000.
Base and Communication in Iran and Iraq (1/2 interest).....	about 20,000,000

In addition to the above contracts, Spencer, White & Prentis, Inc. has successfully completed over 750 contracts, all of which have been in the field of subsurface and heavy construction.

OrganizationLazarus White - President

Was born in the city of Rochester, New York, 68 years ago. He graduated as a Civil Engineer from the Columbia University School of Mines in 1897. He has been a member of the American Society of Civil Engineers since 1903 and at the present time is a Director of this Society, having been elected into that important office in 1939.

His professional record is well know, but no attempt will be made to give it in great detail. He is one of the best known foundation and tunnel engineers in the United States. He has acted as Consulting Engineer for the City of New York, the United States Government, the New York World's Fair Corporation, the City of Detroit, and the Republic of Mexico -- all on tunnels, dams, and foundation work.

He has had wide engineering and contracting experience in subway construction, railroad construction, locks, dams and tunnels. He was a Division Engineer for seven years on the construction of the Catskill Aqueduct, which is still one of the largest tunneling and shaft-sinking jobs in history. His association with that type of work has continued to the present; a corporation of which he is also the President and in which Spencer, White & Prentis, Inc. has a 1/4 interest, having just completed a 7-mile rock tunnel for the new Delaware Aqueduct of New York City.

He is author of the "Catskill Aqueduct", 1913; co-author of "Modern Underpinning", 1917; "Underpinning", 1931; and "Cofferdams", 1940 -- the last two being published by the Columbia University Press.

He has lectured at various universities on Soil Mechanics, Foundations, Cofferdams, etc. and has been special lecturer at Harvard University for ten years. He is the holder of a number of patents in the foundation field.

His honors include an Honorary Sigma Xi and the 1941 Egleston Medal for Distinguished Engineering Achievement.

Edmund A. Prentis - Secretary-Treasurer

Was born in New York City in 1883 and graduated as a Mining Engineer from the School of Mines at Columbia University in 1906. He is an Honorary Member of the Sigma Xi.

He is a member of the American Institute of Mining Engineers, American Society of Civil Engineers, Past-President of the American Standards Association and other scientific and professional organizations.

After graduation, Mr. Prentis worked at the Real del Monte Mine, Pachuca, Hidalgo, Mexico; the Peregrina Mining Co. in Guanajuato, Mexico; the Churruccha Mine in Morococha, Peru; the Miami Copper Mine, Miami, Arizona; a gold mine at Candor, North Carolina; the San Carlos Mining Co., Oaxaca, Mexico; and the Lluvia de Oro Gold Mine in Chihuahua, Mexico. After a number of years of this varied mining experience, he returned to New York City where he shortly became associated with his present partners in the contracting business.

He has been a special lecturer at Columbia University and elsewhere on Engineering subjects, a contributor of many technical articles, and co-author of "Underpinning", "Modern Underpinning", and "Cofferdams". He has served as Consulting Engineer for the City of New York, for the Mexican Government and for the Restoration of the Waterloo Bridge, London, England.

He has kept up his early interest in mining; he was one of the organizers and at present he is Vice-President and Director of the San Luis Gold Mines Co. which is a successful, deep gold mine now operating in Peru.

Charles B. Spencer, Vice-President

Age 56, he was born in New York City, and graduated from Columbia University in 1907 as a Civil Engineer. After graduation he also worked on the Catskill Aqueduct serving as an assistant superintendent of tunnel construction. He then went into the foundation field serving as contract manager for Underpinning and Foundation Company.

During the First World War he was with the United States Army in France as Captain of Ordnance. After this came the formation of Spencer, White & Prentis with whom he has been continuously associated, participating in all its activities.

He is a member of the American Society of Civil Engineers, Honorary Sigma Xi and Tau Beta Pi and other professional societies.

Other Personnel

<u>Engineers</u>	<u>Age</u>	<u>Degrees</u>	<u>College and Year</u>	
Immerman, Harry T.	52	C.E. & P.E.*	Columbia	1913
Spencer, Frederick B.	51	A.B., C.E. & P.E., L.S.**	Columbia	1913
Mentzer, John K.	62	B.S.	Penn State	1906
Goldfinger, Henry	47	C.E., P.E., L.S.	Columbia	1917
Barrows, Daniel J.	34	C.E., P.E.	Lehigh	1930
White, Edward E.	33	C.E., P.E.	Harvard	1932
White, Robert E.	29	C.E., P.E.	Harvard	1934
Brown, Dalton M.	42	C.E., P.E.	Dartmouth	1925
DiGiacinto, Albert	32	C.E., P.E.	N.Y. University	1933
Bates, Vernon V.	46	C.E.	Michigan	1916
LoPicollo, Anthony	31	C.E.	Columbia	1937
Flay, George F. Jr.	30	C.E.	Brooklyn Poly.	1936
Collins, George F.	30	C.E.	R.P.I.	1935

*Licensed Professional Engineer

**Licensed Land Surveyor

BALANCE SHEET
as at
February 28, 1942

Assets

Current Assets:

Cash	194,053.44	
Accounts Receivable	467,120.35	
Inventories	116,408.84	
Cash surrender value of Life Insurance	162,894.00	
Due from affiliated companies and others	111,283.14	
Deposits Receivable	682.00	
Marketable securities (market value \$62,542.)	93,123.14	
<u>Total Current Assets</u>		\$1,145,564.91
Investments in Closely Held Corporations		370,054.95
Investments in Construction Syndicates		715,000.00
Fixed Assets - Net of Depreciation		81,275.36
Other Assets		19,910.27
		<u>\$2,331,805.49</u>

Liabilities and Capital

Current Liabilities - Notes and Accounts Payable		427,298.81
Reserve for Insurance Dividend-Status not determined		37,723.80
Capital:		
Capital Stock	273,000.00	
Surplus	1,593,782.88	1,866,782.88
		<u>\$2,331,805.49</u>

PHOTOGRAPHS

of some

Typical Recent Jobs



Headframe at Shaft 6

In front, the muck-disposal unit with a truck awaiting a load; at left, the concrete mixing plant for the tunnel lining.

This shaft was 685 feet deep. Three miles away across the Hudson River is Shaft 5A, 1020' deep and equipped with similar apparatus. Skip capacity at each shaft about 2500 tons per day.



Drill Jumbo at one of the four headings.

The finished diameter of this tunnel inside the concrete lining is $13\frac{1}{2}$ feet. Length of the tunnel on this contract is 36,600 feet and was driven at the average rate of 32 feet per heading per day.

The above photographs were taken on Delaware Aqueduct Contract #318 for the City of New York which was executed by Pleasantville Constructors Inc. of which Mr. Lazarus White is President and in which Spencer, White & Prentis, Inc. has a 25% interest. This work was done from 1939 to 1942; the contract price was about \$10,000,000.



Lock and Dam #6, on the Mississippi River
at Trempealeau, Wisconsin

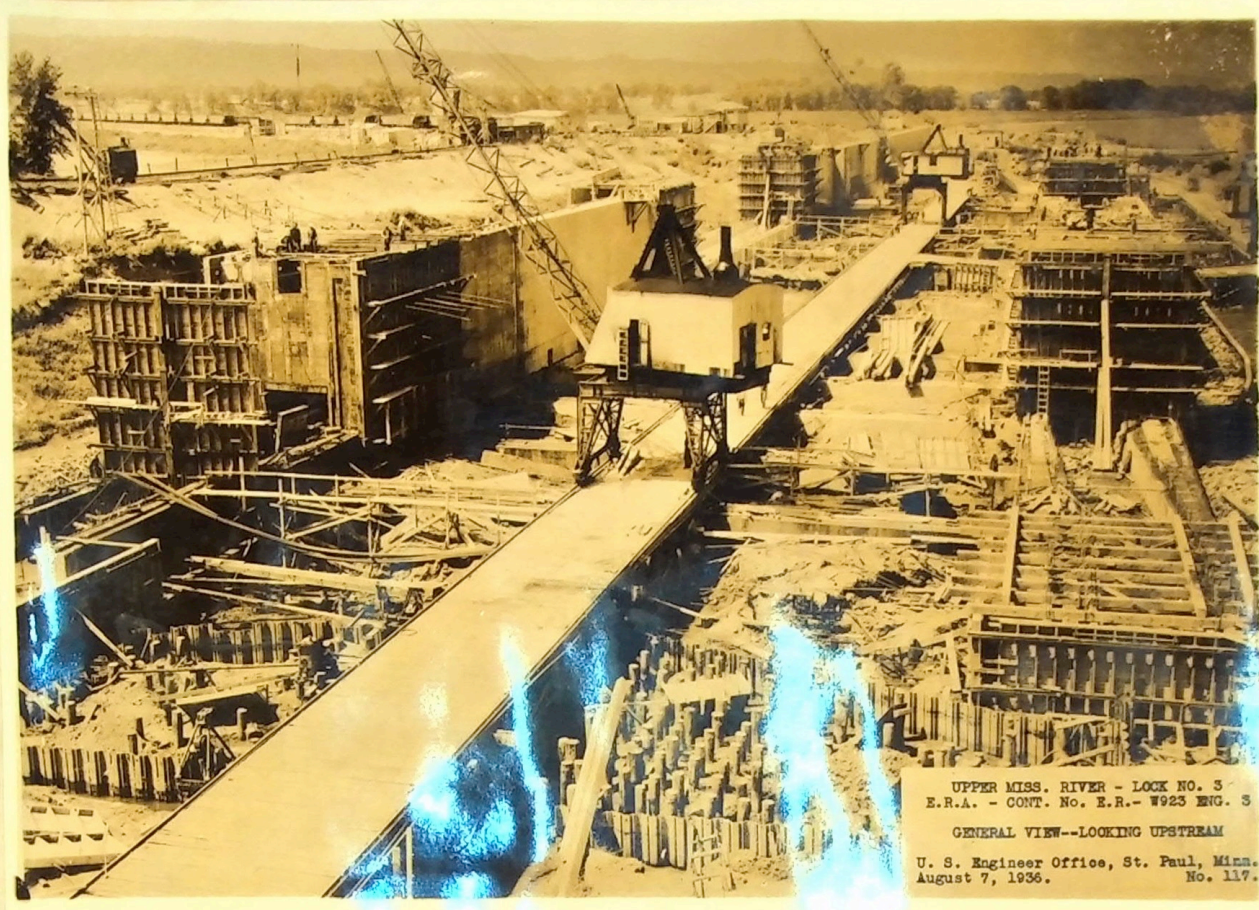
This project was constructed between 1934 and 1936 by Spencer, White & Prentis, Inc. under two contracts with the United States Corps of Engineers.

Some of the major items of work were:

Common Excavation	154,000 cubic yards
Dredged Excavation	394,000 " "
Embankments and Fill	268,000 " "
Timber Piles-Vertical	363,000 lin. ft.
Timber Piles-Battered	15,000 " "
Steel Sheetpiling	191,000 sq. ft.
Rip Rap and Derrick Stone	24,000 cubic yards
Reinforced Concrete	101,000 " "
Structural Steel	1,790 tons

In addition, there were constructed three large cofferdams which were built to withstand a head of 28 feet. Each one of these cofferdams inclosed an area of about 4 acres each and was equipped with pumping plants with total capacity of 12,000 gallons per minute.

The total contract price was \$3,030,000.



UPPER MISS. RIVER - LOCK NO. 3
 E.R.A. - CONT. NO. E.R.- W923 ENG. 3
 GENERAL VIEW--LOOKING UPSTREAM
 U. S. Engineer Office, St. Paul, Minn.
 August 7, 1936. No. 117.

Lock No. 3 is another of the upper Mississippi Canalization projects which was built at Red Wing, Minn. by Spencer, White & Prentis, Inc. for the War Dept.

Some of the major items of work performed were the construction of a 600' long by 110' wide main lock and part of an auxiliary lock, 360' long and 110' wide when finished; the diversion of a slough running through the lock site and its relocation in a new channel 3500' long; the placing of a dredged earth-fill dike section with a top width of 20' and a height varying from 15' to 20' extending a distance of 2300' from the lock to high ground, this dike being protected against erosion by an 18" layer of crushed stone and rip-rap. Among the major quantities of work involved were;

Common Excavation	416,000 cubic yards
Channel Excavation	54,000 " "
Embankment	572,000 " "
Timber Piling-Vertical	271,000 linear feet
Steel Sheet Piling	96,000 square feet
Rip-Rap & Derrick Stone	11,000 cubic yards
Reinforced Concrete	72,000 " "
Structural Steel	930 tons

This project was started in the Fall of 1935 and was completed in the Winter of 1936-1937. The total contract price was \$2,320,000.

