UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

VATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

| FOR N | | |
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| | | |

AUG 8 1979

DATE ENTERED

RECEIVED

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

Western Portland Cement Plant

AND/OR COMMON

2 LOCATION

| STREET & NUMBER | | | | | |
|--|--------------------------------|-------------------|--|------------------------------|--|
| NE 1/2 of S | ec. 17 T93 R56 | | NOT FOR PUBLICATION | | |
| CITY, TOWN | | | CONGRESSIONAL DIST | RICT | |
| Yankton | <u> </u> | VICINITY OF | No. I | | |
| STATE South Dak | ota | CODE 046 | Yankton | CODE 135 | |
| 3 CLASSIFIC | ATION | | | | |
| CATEGORY | OWNERSHIP | STATUS | PRES | SENTUSE | |
| DISTRICT | PUBLIC | OCCUPIED | AGRICULTURE | MUSEUM | |
| BUILDING(S) | X PRIVATE | X_UNOCCUPIED | COMMERCIAL | PARK | |
| STRUCTURE | ВОТН | WORK IN PROGRESS | EDUCATIONAL | PRIVATE RESIDENCE | |
| _Xsite | PUBLIC ACQUISITION | ACCESSIBLE | ENTERTAINMENT | RELIGIOUS | |
| OBJECT | IN PROCESS | YES: RESTRICTED | GOVERNMENT | SCIENTIFIC | |
| | BEING CONSIDERED | YES: UNRESTRICTED | INDUSTRIAL | TRANSPORTATION | |
| ŝ | | NO | MILITARY | Х отнев: unoccupi | |
| STREET & NUMBER 913 Cre CITY, TOWN | stview | | STATE | | |
| Vermil1 | ion | VICINITY OF | South Dakota | | |
| 5 LOCATION | OF LEGAL DESCR | IPTION | | MM | |
| COURTHOUSE, REGISTRY OF DEEDS, | ^{ETC.} Yankton County | Courthouse | | | |
| STREET & NUMBER | Third and Broa | dway | | | |
| CITY, TOWN | | | STATE | | |
| | Yankton | | South Dak | ota | |
| 6 REPRESEN | TATION IN EXIST | ING SURVEYS | | _ | |
| TITLE | | | | | |
| | Dakota Historic Sites | Survey | | | |
| DATE | | | ······································ | | |
| X | 1978 | FEDERAL | LOCA | L | |
| DEPOSITORY FOR SURVEY RECORDS | الارتيان **. بالارتقال ا | | | × | |
| | <u>Historical Preservat</u> | ion Center | | | |
| CITY, TOWN | Vermillion | | state South DAkot | а | |
| | Verminium | | JULI DAKUL | ,α | |

7' DESCRIPTION

| CON | DITION | CHECK ONE | CHECK (| DNE |
|---------------------------|------------------|----------------------|---------------------|--------------|
| EXCELLENT GOOD FAIR | DETERIORATED | UNALTERED ALTERED | _XORIGINAL MOVED | SITE DATE |

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Initial construction of the Western Portland Cement Company buildings began in 1889 and continued up to December 4, 1890, when all departments were in operation. The main building consisted primarily of brick from the local Pressed Brick Company and some of the brick was made out of clay found on their own land. The main building measured 320 feet long, 130 feet wide, and 50 feet high at the apex. The rest of the brick and wood structures consisted of mud basins, six kilns, plus storage and shipping warehouses. All structures were located four miles west of Yankton, South Dakota, just south of the chalk cliff. Horse-drawn carts hauled the chalk rock over a narrow guage track. Clay was moved up the bluff above the buildings and sent to the mill by another narrow guage track in cars that worked over an automatic switch.

Three artesian wells were dug on the property of which one was described as being eight inches in diameter and thrusting water out at an average of 150 pounds per square inch. All three wells are still flowing. The actual industrial plant occupied ten acres out of the 3,000 acres controlled by Western Portland Cement Company. A broad guage railroad was built along the bottom to Yankton, which was the shipping point and also the residence for the cement plant employees.

In 1904 Western Portland Cement shut down its operation for remodeling. The company quadrupled its annual output with four new rotary kilns so large that three railroad flat-cars were needed to transport each one to the factory. There was also a switch at this time from a semi-wet process to a dry process. In turn it was decided to alter the fuel type from coke to coal for financial reasons. This modification meant the purchasing of coal crushing and drying machinery and increased operational costs. Following a financial breakdown in 1910, the plant was finally sold to a cement company out of Sandusky, Ohio, who ordered a complete shutdown, dismantled the machinery, and shipped it east. There were periodic rumors of re-opening since the factory was not completely dismantled until after World War I, but the offices had closed in their downtown location and the plant was destroyed.

Today only the ruins of the plant remain. The only highly visible structure of the plant buildings is one smoke stack from the kilns with the arched kiln ruin at its base. Brick foundations of the outbuildings, large vats and the artesian wells can be found. The artesian wells that created mineral water sloughs are still in existence.

8 SIGNIFICANCE

| PERIOD | AR | EAS OF SIGNIFICANCE CH | IECK AND JUSTIFY BELOW | |
|-------------|------------------------|-------------------------|------------------------|---------------------|
| PREHISTORIC | ARCHEOLOGY-PREHISTORIC | COMMUNITY PLANNING | LANDSCAPE ARCHITECTURE | RELIGION |
| 1400-1499 | ARCHEOLOGY-HISTORIC | CONSERVATION | LAW | SCIENCE |
| 1500-1599 | AGRICULTURE | ECONOMICS | LITERATURE | SCULPTURE |
| 1600-1699 | ARCHITECTURE | EDUCATION | MILITARY | SOCIAL/HUMANITARIAN |
| | ART | ENGINEERING | MUSIC | THEATER |
| X.1800-1899 | COMMERCE | EXPLORATION/SETTLEMENT | PHILOSOPHY | TRANSPORTATION |
| | COMMUNICATIONS | _Xindustry invention | POLITICS/GOVERNMENT | OTHER (SPECIFY) |
| SPECIFIC | es 1889 | BUILDER/ARCH | HITECT | |

STATEMENT OF SIGNIFICANCE

The Western Portland Cement Company started in 1891 as a result of the discovery of the chalk rock bluffs west of Yankton and other parts of the Niobrara formation. Mr. Robert Yates, an Omaha, Nebraska resident and a business colleague, Mr. Willaim Plankinton, a wealthy Milwaukee capitalist, formerly of England, and Mr. John W. Summers, an expert in making portland cement arrived in 1889 and began tests. Mr. Summers, a former manager of a large cement plant in West Drevton. Middlesex, represented English interests in the business. Mr. Plankinton, a representative of the Chicago-Milwaukee-St. Paul Railroad had intentions of producing inexpensive freight rates for the factory when built.

The site near Yankton was decided upon by its location on the river, the two railroads running out of the city, and the condition of the chalk rock bluffs. The trio quickly bought 300 acres of land with money invested by both the city of Yankton and Western Portland Cement Company, promising employment for hundreds of people and bringing new business to the city and state.

Josiah A. Pierson, a prominent land owner who sold a portion of his land to the cement company, platted and began to build a small town next to the cement factory. The town of Pierson was intended to be a communitee of cement workers, but the company felt it beneficial for the employees to live in Yankton and commute by railroad. The town was platted on May 20, 1890 and was vacated seven years later having only a few residences having been constructed.

After two years of extensive testing, the clay and chalk rock was found 99% pure. Starting with an excellent record, the Western Portland Cement Company began operations at least ten years before the American portland cement industry initiated its push from infancy to late adolescence around 1901. The plant was finished in late 1890, and when running full scale it employed seventy men. It sent out its first shipment of cement in 1891. Portland cement was a growing industry in the United States at the time. Tests on the cement were sent to England which proved that when 37 days old, the mixture showed a tensile strength of 1,080 pounds per square inch, more than English portland cement.

During the first year 31,813 barrels, weighing 380 pounds each, were produced. Things were looking up even more when Western Portland Cement Company was prestigiously awarded first premium over all other building cements at the Chicago Worlds Fair in 1893. Production increased to 61,725 in 1895 but slumped back to 24,000 barrels in 1896. Its daily capacity of 250 barrels provided semi-wet process cement

9 MAJOR BIBLIOGRAPHICAL REFERENCES

| Kabeiseman, John R. Interview July, 1978 Karolevits, R.F. <u>Yankton, A Pioneer Past</u> Aberdeen, S.D. Loescher, Samuel M. <u>Imperfect Collusion in the Cement Inc</u> Harvard University Press. 1959 | North Plains Press 1972 lustry Cambridge, Mass. |
|---|--|
| DGEOGRAPHICAL DATA UTN NOT VERIFIED | |
| QUADRANGLE NAME QUA | DRANGLE SCALE |
| A 1, 4 6 2 4 2, 1, 5 4, 7, 4, 8 1, 2, 0 B 1, 4 6 2 4 ZONE EASTING NORTHING ZONE EASTING | 140 4748230 NORTHING 300 4748340 |
| ELII LIIIIII FLIIIII | |
| GLADITIES LA LA LA HELDER HELDER | |
| VERBAL BOUNDARY DESCRIPTION The nominated property is loca substation, which is 300 feet north of South Dakota State northwest of Gavins Point National Fish Hatchery and 900 which runs in a northeast-southwest direction. LIST ALL STATES AND COUNTIES FOR FROPERTIES OVERLAPPING STATE STATE CODE COUNTY | Highway #52. It lies 1200 fee feet southeast of power lines |
| STATE COUNTY | CODE |
| NAME / TITLE | and the second second second second |
| Earl V. De Wald ORGANIZATION | ATE STATES |
| Historical Preservation Center | July, 1978 |
| STREET & NUMBER | |
| CITY OR TOWN | STATE |
| Vermillion | South DAkota |
| 12 STATE HISTORIC PRESERVATION OFFICER CER THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN NATIONAL | THE STATE IS |
| As the designated State Historic Preservation Officer for the National Historic Preservation hereby nominate this property for inclusion in the National Register and certify that it h criteria and procedures set forth by the National Park Service. | |
| TITLESHPO/Director, Historical Preservation Center | DATE 7/27/79 |
| FOR NPS USE ONLY I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGIST | |
| W KEEPER OF THE NATIONAL REGISTER | DATE 8-17.77 |
| ATTEST: William H Kallonal Redister CHIEF OF REGISTRATION | DATE 9:18:79 |
| | |

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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| RECEIVED | AUG 3 | 1379 | | |
| DATE ENTER | ED | SEP | 19 | 1979 |

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 1

to such cities as Omaha, Milwaukee, Salt Lake City, and Helena, Montana, for use in construction of government buildings. This company was also asked to furnish part of the cement used in making of the Panama Canal and in the course of time provided cement for the building needs of the western half of the United States.

Even with good sales the company could not keep out of the red, and problems arose causing a shutdown. The plant was reorganized and sold to New York and Chicago capitalists. Operations continued without much change until 1904 when the mill was again shut down for remodeling. The improvements and changes from semi-wet to dry process resulted in an increase of production fourfold. Fifty thousand' barrels were produced in 1903 compared to 248,000 barrels in 1905. The four new kilns and the switch to coal, added to a decline in the price of cement due to eastern competition, began to take its toll.

Company president, William Plankinton, died in 1905, leaving his position to his less knowledgeable son who was unable to sustain the firm's successful operation. Along with the heavy debts, it was hinted that perhaps an attempt to mix too much common earth with clay caused the quality to drop. Carloads of cement were actually rejected and returned to the plant.

Around 1910, European imports were lessened by the increase of cement production in the United States. The McKinley tariff of 1890 also slowed the rate of imports. The price of cement per barrel declined from \$1.75 in 1905 to \$1.00 in 1909. The plant was sold in 1910 to a Sandusky, Ohio cement company. The new owners decided to shut down the plant, dismantle the machinery, and ship it east.

The significance of the Western Portland Cement Plant is that it was an important factor in promoting the use of portland cement products both in South Dakota and throughout the United States. Yankton became known as the "Cement City", the factory contributing to its growth and development. The plant is said to have been one of the largest and most complete mills at the time it was in full operation. The Western Portland Cement Plant was the only in-state source of cement in South Dakota during its formative years. Its loss reflected the expansion of the cement industry in the United States.

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The exact delineation of the property is as follows: Beginning at the northeast corner of Section 17, Township 93 North, Range 56 West, proceed west 410 meters to the unnamed stream, then southeast along the eastern margin of stream/pond to a point 200 meters south of the northern boundary, then east to the section line between Sections 17 & 16, then north along that line to the point of origin.





- Western Portland Cement Company Yankton, South Dakota
- SE corner 14/624215/4748120
- W corner 4/624140/4748230
- E corner 4/624370/4748235
- √ corner 1/624300/4748340



Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

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