1 NAME

HISTORIC
Washburn A Mill Complex

AND/OR COMMON
Washburn A Mill Complex

2 LOCATION

STREET & NUMBER
First Street South at Portland Avenue

CITY, TOWN
Minneapolis

STATE
Minnesota

3 CLASSIFICATION

CATEGORY
-DISTRICT
-STRUCTURE
-SITE
-OBJECT

OWNERSHIP
-PUBLIC
-PRIVATE
-BOTH
-PUBLIC ACQUISITION
-IN PROCESS
-BEING CONSIDERED

STATUS
-PRIVATE
-UNOCCUPIED
-WORK IN PROGRESS
-ACCESSIBLE
-YES: RESTRICTED
-YES: UNRESTRICTED
-X NO

PRESENT USE
-AGRICULTURE
-COMMERCIAL
-EDUCATIONAL
-ENTERTAINMENT
-GOVERNMENT
-INDUSTRIAL
-MILITARY
-X OTHER: Storage

4 OWNER OF PROPERTY

NAME
Riverside Industries (Ben Miller, President)

STREET & NUMBER
701 First Street South

CITY, TOWN
Minneapolis

STATE
Minnesota

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Hennepin County Recorder & Registrar of Deeds

STREET & NUMBER
Hennepin County Govt. Center/300 South 6th Street

CITY, TOWN
Minneapolis

STATE
Minnesota

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
Minnesota Historical Society Historic Sites Survey; also in St. Anthony Falls Historic District (NR)

DATE
1977; 1971

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR SURVEY RECORDS
Minnesota Historical Society National Register of Historic Places

CITY, TOWN
Minneapolis; Washington

STATE
Minn.; D.C.
Situated in the heart of the Minneapolis Milling District and directly across the Mississippi River from the famous Pillsbury A Mill, the Washburn A Mill Complex symbolizes, first, the revolutionary technological and organizational innovations that the Washburn Crosby Company contributed to the American milling industry and, second, the birth and subsequent development of General Mills into the first truly national milling company. Seven major structures and five minor ones form the complex. Among them is the Washburn A Mill, erected originally in 1874 and rebuilt in 1879-80. Equipped in the beginning exactly as the now-demolished Washburn C Mill, the A Mill recalls that structure's role as the Nation's first automatic, all-roller, gradual reduction mill. Also in the complex are two elevators, the No. 1 Elevator and the Feed Elevator, erected in 1905 and 1928 respectively. They and the Utility Building, first home of the famed "Betty Crocker" kitchens, recall the era early in this century when General Mills emerged largely from an expansion of the Washburn enterprises, underwent incorporation, became the biggest milling firm in the country, and took over operation of this entire complex.

Washburn A Mill and Wheat House: The principal structure in the complex is the Washburn A Mill. Cadwallader C. Washburn built it originally in 1874 and then rebuilt it after a disastrous explosion and fire leveled it in 1878. The same catastrophe also destroyed Washburn's famous B Mill. When he began rebuilding the complex in 1879, he first erected the revolutionary C Mill and then reconstructed the A Mill and installed in it the same kind of innovative automatic, all-roller, gradual reduction machinery that he had put in C. Since that time the C Mill has been destroyed, leaving the 1879-80 A Mill as the only surviving direct manifestation of Washburn's innovative technology. Interestingly, until 1899 the structure belonged not to C. C. Washburn himself but to the Flouring Mills Company, a firm that represented Washburn and his heirs. The company finally acquired the mill outright only because it seemed likely to fall under the control of a flour trust.

In 1928 a fire gutted the interior of the A Mill, but General Mills rebuilt that portion while retaining the original 1879-80 exterior. The mill continued to operate until 1965, and although today it serves primarily as a partially used warehouse, it contains a treasure of early milling machinery, including a score of teak sifting machines manufactured by the Great Western Manufacturing Company of Leavenworth, Kans., about 1920 and perhaps twice that number of 9x24 and 9x30 W. D. Gray (continued)
The Washburn A Mill and its companion structures outstandingly symbolize both the growth and development of General Mills, Inc. and the radical transformations undergone by the entire flour milling industry in the late 19th and early 20th centuries. According to flour milling historian Herman Steen, technological and organizational innovations undertaken by the Washburn Crosby Company, beginning in the 1870's, formed the basis for the emergence of General Mills as the "largest milling company in the world" and at the same time constituted "the most far-reaching revolution in all the annals of flour milling." ¹ This revolution determined the direction the industry was to take not only in Minnesota but throughout the United States.

The Washburn A Mill is the only structure remaining from the original Minneapolis milling complex established by Cadwallader C. Washburn in the 1870's. As such it is the most significant link between the Washburn Crosby milling company of the 19th century and the vast operations of the present-day General Mills. However, the entire present-day Washburn A Mill complex represents innovative decisions in testing, research, merchandising, advertising, export marketing, diversification, and corporate structure which helped make Washburn Crosby and later General Mills leaders in the milling industry. They also represent General Mills' growth into one of the more notable examples of successful large-scale diversification in modern American industry. In 1976 the corporation had sales of $2.3 billion from a range of products that included games, clothing, furniture, and seafood.

The industry as a whole, not just Washburn Crosby, benefited from the technological innovations undertaken at the Minneapolis mills in the 1870's. These culminated in 1879 in construction of the now-demolished C mill in the Washburn complex. It housed

¹Herman Steen, Flour Milling in America (Minneapolis, 1963), 42, 272.
MAJOR BIBLIOGRAPHICAL REFERENCES

(See continuation sheet.)

GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY: ca. 3.5 acres

UTM REFERENCES

ZONE EASTING NORTHING
A [1.5] 417,974.0 4,918,050.0
B [1.5] 417,975.0 4,918,043.0
C [1.5] 417,981.0 4,918,035.0
D [1.5] 417,970.0 4,918,033.0

VERBAL BOUNDARY DESCRIPTION

(See last page of description.)

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

<table>
<thead>
<tr>
<th>STATE</th>
<th>CODE</th>
<th>COUNTY</th>
<th>CODE</th>
</tr>
</thead>
</table>

FORM PREPARED BY

NAME / TITLE: Visit and Description by George R. Adams, Director of Education; History by James B. Gardner, Historian, Historic Landmarks Project

ORGANIZATION:
American Association for State and Local History

DATE: September 1978

ADDRESS:
1400 Eighth Avenue South
Nashville, Tennessee 37203

STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___  STATE ___  LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

KEEPER OF THE NATIONAL REGISTER
Roller Mills made by the Edward P. Allis Company of Milwaukee, Wis., apparently about that same time. The present owner is considering utilizing at least some of these in a milling museum exhibit that apparently will exist alongside apartments that he hopes to develop in the adjoining Utility Building.

The A Mill stands adjacent to the site of the C Mill and is a seven-story structure of rock-faced limestone. It features a flat roof with a one-story, three-bay-wide, raised monitor; has walls which taper from 5 feet thick at the base to 20 inches thick at the top; and displays mostly two-over-two hinged windows set in segmentally arched openings. Except for attachment of the Utility Building and Feed Elevators, there are no significant external alterations other than an extended rear wall. Inside, the building exhibits heavy wood-beam construction throughout. A few partitions have been added and removed over the years, but the general character of the interior has been maintained.

Attached to the southeast side of the A Mill is a seven-story masonry Wheat House also erected in 1879 and either expanded or partially rebuilt in 1917-19. Its internal construction resembles that of the A Mill, of which it is an integral part.

A Mill Office: Attached to the northwest end of the northwest side of the A Mill is the A Mill Office. Originally two stories high and four bays by three in size, it housed the Washburn Crosby general offices from 1880 to 1885. At present it has a relatively modern third-story brick addition and a two-bay-wide three-story rear wing. Fenestration in the original portion matches that of the A Mill. The now-vacant office easily could be returned to near its original appearance by removing the two small additions.

Utility Building: Rising 11 stories alongside the southwestern end of the northwest wall of the A Mill is the Utility Building. The eleventh story is a penthouse on the northern half of the structure. Constructed in 1914 of reinforced concrete with brick interfill, the edifice is today painted a shade of pale yellow.
Factory-type windows light the building on its northeast and southwest sides, and on the latter side three brick pilasters rise from ground level to the base of a segmentally arched roof parapet. Each pilaster supports a 7-foot-high terra cotta figure representing a miller. Norwegian-American sculptor John Karl Daniels designed these figures at the request of the building's architects, Hewitt and Brown.

As the largest structure in the complex, the Utility Building originally housed a packing floor, a belt shop, a sheet metal shop, an employee cafeteria, and a power plant. In addition the company-owned Washburn Crosby radio station, WCCO, broadcast from the structure, and at one time the Betty Crocker kitchens were situated here. The current owner of the now-vacant building hopes to convert it into an apartment complex, but he plans to retain its external architectural integrity.

Humboldt Mill: The oldest building in the complex is the Humboldt or E Mill. It was not initially a Washburn structure, but like the earlier Washburn buildings, it was destroyed in the 1878 explosion and fire. Rebuilt that same year, the Humboldt belonged to Hinkle, Greenleaf and Company in 1896 when Washburn Crosby began leasing it. In 1899 Washburn Crosby purchased it outright, making it only the second mill owned rather than leased by that firm. Built much like the A Mill, the Humboldt is also of limestone construction. It rises five stories in height and features rectangular casement windows set under round-arched woodmolds. Now largely vacant, the structure is used partly as a warehouse.

Elevators: There are two elevators in the complex. Both are white-painted and of reinforced concrete construction with circular bins. The larger of the two is the General Mills No. 1 Elevator. Erected in 1905, it features 14 bins and a multistory metal-clad superstructure. The smaller is the Feed Elevator, erected in 1928 with 15 bins. Both are still used occasionally to store non-combustible commodities, and both appear to be in generally good condition.
Other Structures: Five additional structures are attached to various of the above-described buildings. These "other" structures include a small rectangular, masonry Reception Room at the rear of the A Mill Office; a rectangular, masonry Engine Room off the northwest corner of the Utility Building; a small, almost square-shaped, masonry Pump House between the A Mill and the Feed Elevator; and two Metal Sheds—one for storage and one for unloading—situated rear or southwest of the No. 1 Elevator. Of these "other" structures, only the Metal Sheds appear to contribute importantly to the national significance of the complex.

Boundary Justification: The boundary of the inventoried property includes approximately 3.5 acres and only those structures described above. No modern structures intrude.

Boundary Description: As indicated in red on the accompanying maps [(1) U.S.G.S., 7.5' Series, Minnesota, Minneapolis South Quad., 1967, photorevised 1972; and (2) AASLH Sketch Map, 1978], a line beginning at a point on the southwest curb of First Street South approximately 150 feet due northwest of the northwest corner of the Washburn A Mill and extending south-southwestward approximately 300 feet to the northeast edge of the right-of-way of the Burlington Northern Railroad; thence, southeastward about 500 feet along said right-of-way to the northwest edge of the right-of-way of Portland Avenue; thence northeastward approximately 300 feet along said right-of-way to a point at which Portland Avenue makes a 90-degree turn northwestward into First Street South; thence, northwestward approximately 500 feet along the southwest edge of this portion of First Street South to the point of beginning, and encompassing, regardless of the above description, only the above-noted nine structures and land belonging to Riverside Industries.
the Nation's first automatic, all-roller gradual reduction mill. According to milling historian Robert Frame, this was "a revolutionary synthesis" of technology that constituted what historian William C. Edgar calls "the most radical advance ever made in flour milling."² By making possible the full use of new Northwest grain supplies and providing for significant economies of scale, this new technology became the basis for transformation of the flour milling industry from a relatively small-scale, localized turn-of-the-century enterprise to the large modern mass production industry that it is today.

The Washburn A Mill Complex symbolizes, first, the revolutionary technological and organizational innovations that the Washburn Crosby Company contributed to the American milling industry and, second, the birth and subsequent development of General Mills into the first truly national milling company. Seven major structures and five minor ones form the complex. Among them is the Washburn A Mill, erected originally in 1874 and rebuilt in 1879-80. Equipped in the beginning exactly as the now-demolished Washburn C Mill, the A Mill recalls that structure's role as the Nation's first automatic, all-roller, gradual reduction mill. Also in the complex are two elevators, the No. 1 Elevator and the Feed Elevator, erected in 1905 and 1928 respectively. They and the Utility Building, first home of the famed "Betty Crocker" kitchens, recall the era early in this century when General Mills emerged largely from an expansion of the Washburn enterprises, underwent incorporation, became the biggest milling firm in the country, and took over operation of this entire complex.

(continued)

Commercial milling at the Falls of St. Anthony on the Mississippi River began in 1849. The first operator, Robert Smith, proved incompetent in developing the potential of this significant source of water power, but his efforts to secure capital led to the involvement of Cadwallader C. Washburn in the development of the region as a major milling center. In 1855 Washburn, a Wisconsin lumberman and politician, invested capital from his enormously profitable lumber business in Smith's floundering Minneapolis Mill Company. Ten years later Washburn bought out Smith and invested an additional $100,000 in the construction of the Washburn B Mill, then the largest flour mill west of Buffalo, N.Y. Located on the west side of St. Anthony's Falls, the B Mill was termed "Washburn's Folly" because its large capacity was considered unrealistic in terms of the limited market for the flour then being produced in area mills. Over the next decades, however, Washburn's milling operations revolutionized the flour industry and, according to Steen, made Minneapolis "the foremost milling center in the world."

Washburn's operations enabled 19th-century Minnesota millers to produce a higher quality flour from the hard spring wheat grown in the area. Previously used low grinding techniques produced a poor flour, discolored by ground-up bran and limited in keeping qualities. Although considered a stronger bread flour because of its higher gluten content, it could not compete with the higher grades milled in the East from soft winter wheat. Determined to make his milling operations succeed, in 1870 Washburn secured the help of George H. Christian as manager-partner of his B Mill. In order to reduce flour discoloration, Christian engineered the adoption of "New Process" gradual reduction techniques that involved multiple grindings at slower speeds and with reduced pressure. Christian also engaged Edmond La Croix and George T. Smith to perfect and install in the Washburn mill in 1871 a French-designed purifier that would remove objectionable bran particles and leave the wheat middlings from which a high grade flour could be milled. (continued)

3Steen, Flour Milling, 50.
By making possible the production from hard spring wheat of a high-quality flour preferred by bakers even over the winter wheat flour, the "New Process" gradual reduction techniques and the middlings purifier constituted, says Steen, "the chief basis for the rapid development of the milling industry in Minneapolis."

The next major innovation in flour milling also centered in Washburn's Minneapolis mills. After Washburn expanded his milling operations in the mid-1870's, an explosion destroyed all but the old B Mill on May 2, 1878. The necessity of rebuilding, however, gave Washburn the opportunity to experiment. In 1879 he authorized construction of an experimental automatic, all-roller gradual reduction mill in his new C Mill alongside the traditional millstone run. Although Hungarians and even a few Americans had experimented with rollers earlier, according to milling historian Edgar, the Washburn C Mill was considered "the first complete automatic roller-mill in the world." Washburn next moved beyond experimentation and rebuilt his A Mill in 1879-80 along the lines of the C Mill model. This demonstrated the advantages of an all-roller mill in reduction of demands in space, power, and oversight, thereby institutionalizing the "milling revolution" of the previous decade. Frame concludes that these developments represented "the first unqualified synthesis of the various milling theories and methods which had been gathering force as the 1870's progressed. Washburn created a complete working example of the new technology and opened the way for others to follow." "The sum of these events constitutes," says Steen "the most far-reaching revolution in all the annals of flour milling."

(continued)

4Ibid., 45.
5Edgar, Medal of Gold, 100.
6Frame, Millers to the World, 56.
7Steen, Flour Milling, 42.
In 1879 Washburn went into partnership with John Crosby and William H. Dunwoody. The new Washburn, Crosby, and Company profited immensely from the increased production and improved quality that resulted from the innovations of the 1870's and became one of the Nation's leading millers. Yet even more significantly, the new technology transformed the entire flour milling industry and propelled Minneapolis to the forefront as the Nation's leading flour producer. The new continuous-process factories made possible for the first time substantially increased production and hence the economies of scale central to the rise of the large modern industrial enterprise. As daily output from Minneapolis mills increased from 242 barrels in 1876 to 1,837 in 1890, the four largest millers secured control of over 87 percent of the area's milling capacity. The advantages to concentrated ownership included increased control over supply purchases, ability to attract capital, sufficient scale for major equipment investment, favorable railroad rates, sufficient volume to support research and experimentation, and extensive advertising and sales operations. According to Edgar, the result was the emergence of "the modern great merchant mill."8

As the leading flour miller at the turn of the century, Washburn Crosby continued its innovative course in research, marketing, and advertising. In 1893 it set up a testing room, which according to historians John Storck and Walter D. Teague represented "the first such step to be taken by an American miller," and then initiated in 1898 the first research program in the industry.9 The company also led the way in marketing and advertising. In 1877, Washburn dispatched a business associate to England to secure expanded export markets as an outlet for increasing domestic surpluses. The successful mission, according to company historian James Gray, "changed the outlook for an entire industry, placed Minneapolis incontestably at its head, and set patterns of operation for many years to follow."10 In the domestic market, the merchant (continued)


9John Storck and Walter D. Teague, Flour for Man's Bread: A History of Milling (Minneapolis, 1952), 315.

10James Gray, Business without Boundary: The Story of General Mills (Minneapolis, 1954), 35.
millers of the late 19th century focused on eliminating the middlemen and building reputations of their own based on brand names. Washburn Crosby again led the way, and on August 19, 1880, shipped the first flour under the company's Gold Medal brand name, a reference to the medal won by the company at the 1880 Cincinnati Exhibition for its patent flour. Then with an advertisement in the Ladies' Home Journal in 1893 Washburn Crosby became, says Storck and Teague, "the first to initiate national consumer advertising of its flour." ♦ Changes in consumption patterns after the turn of the century and a subsequent decline in wheat flour consumption forced the industry to pay even more attention to advertising and marketing strategy. Washburn Crosby was fortunate by then to have as its president James S. Bell, a man who possessed, according to Gray, "a brilliant understanding of the domestic market that won him admiration among his fellow millers as the greatest merchandiser of his time." ♦ Examples of the marketing techniques of the firm include the familiar slogans "Eventually--Why Not Now?" and "Kitchen-tested" and the company's symbol of quality, Betty Crocker.

Diversification proved as significant for Washburn Crosby as its mass advertising campaigns in coping with the effects of changing consumption patterns. In 1908 the company made a "modest start toward diversification" when it began milling rye flour in the Washburn A Mill. ♦ From there, the company moved on to such now-familiar products as Wheaties, Bisquick, Cheerios, and Brown 'n' Serve Rolls, and even became involved in the production of industrial chemicals, games, vitamins, clothing, and furniture.

Washburn Crosby recognized the necessity of horizontal consolidation as well as vertical integration and diversification in order for the company to remain the Nation's leading miller. By 1922 competition from Kansas' Turkey Red hard winter wheat and the reduction of Minneapolis' freight advantages led to the city's decline as a milling center, and by 1930 Buffalo, N.Y., reigned as the top milling city. This did not hurt Washburn (continued)

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11Storck and Teague, Flour for Man's Bread, 273.
12Gray, Business without Boundary, 50.
13Storck and Teague, Flour for Man's Bread, 34.
Crosby, though, for in 1903 it had been the first of the Minneapolis millers to expand its operations into the Buffalo area, constructing there the largest mill in the world at that time. The company also expanded into Chicago, Kansas City, and other regional centers. As the firm's activities and holdings increased, its organization changed accordingly. Washburn owned the mills himself from 1865 until his death in 1882 but operated them in the 1870's under the names of various manager-partners. He set up Washburn Crosby in the same way in 1879. The company leased the mills from Washburn and his heirs until 1899, when the partners purchased the properties in order to avert sale to a flour trust. By 1928 the company realized the necessity of further change in line with the vertical and horizontal integration it had undertaken in recent decades. A new corporation named General Mills was set up in June 1928, pulling together into a holding company Washburn Crosby and a group of other milling companies scattered across the nation. General Mills underwent further reorganization in 1937 and became an operating company responsible for nationwide policy. According to Steen, "It thus became the first milling company to be national in scope." In succeeding decades, numerous mergers further broadened the company's scope beyond the flour milling and related enterprises upon which it had been founded. The General Mills corporation of today ranks in the forefront of American industry with a fully diversified product line and net sales in 1976 of $2.3 billion.

14Steen, Flour Milling, 76.
"Avoiding the Bilge Water," *Forbes*, CXVII (June 15, 1976), 27.


Northwestern Miller, March 25, 1881, 1.


United States Miller, August 1880, 55.