Form No. 10-300 (Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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

1 NAME

HISTORIC
Columbus Historic Riverfront Industrial District

AND/OR COMMON
Columbus Historic Riverfront Industrial District

2 LOCATION

STREET & NUMBER
In Columbus along the east bank of the Chattahoochee River at four non-contiguous areas from 8th Street North to 38th Street. (See continuation sheet)
__NOT FOR PUBLICATION

CITY, TOWN
Columbus
__ VICINITY OF

CONGRESSIONAL DISTRICT
3rd-Jack Brinkley

STATE
Georgia

CODE
13

COUNTY
Muscogee

CODE
215

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
✓DISTRICT	__PUBLIC	✓OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	✓BOTH	✓WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	✓YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	✓INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME
(See Continuation Sheet)

STREET & NUMBER

CITY, TOWN
__ VICINITY OF

STATE

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Deed Books, Columbus Government Center

STREET & NUMBER
10th Avenue

CITY, TOWN
Columbus

STATE
Georgia 31901

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
Historic American Engineering Record

DATE
1977
__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS
Library of Congress

CITY, TOWN
Washington

STATE
D.C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
✓EXCELLENT	✓DETERIORATED	_UNALTERED	✓ORIGINAL SITE
✓GOOD	_RUINS	✓ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Bibb Mill Complex: Architecturally, the most impressive feature of the Bibb Mill is its tremendous length. This 5 story, light red brick building begins at a bluff overlooking the Chattahoochee River and extends 1010 feet to the east. The northern side is an uninterrupted series of approximately 90 arched windows now covered with corregated metal. On the southern side, the three stages of the mill's construction (300 feet originally, 200 more feet in 1915, and the remainder in 1920) are more discernible. In the center of the initial structure is a brick tower, three bays wide extending two stories above the mill. The tower's top row of windows are open, Italianate arches. The only other towers are two plain brick elevator shafts in the 1920 section. A sky light that initially ran the entire distance of the mill has been removed. The front of the structure (128 feet wide) incorporates decorative stones in the brick facade: as individual decorations, in courses, and surrounding a large clock.[23]

At the opposite or western end of the mill, the pulley-house (a smaller 3 story structure, and rope tower (the first bay of the main mill) contains the original power transmission equipment. American rope drive systems were common when the company installed it, but their use peaked about 1910. Remarkably, this one continued to function until 1954 when the drive shaft snapped. The broken shaft remains in the pulley house; driving sheaves still rest at the foot of the rope tower, and wooden platforms on floors 1, 2, and 4 hold the driven sheaves (which turned the mill's line shafting) and the track, cart, and idler pulleys (which adjusted the rope's tension). These surviving artifacts are a source for the history of technology since the path of power transmission can easily be traced.

Several structures have been added to the main mill. Extending to the south from the eastern end of the mill is a large 1 story weave shed built in two stages (1932 and 1949). On the north side of the main mill near the west end, an "L" shaped building (1912) served as the first weave shed and now functions as an opening and picking area. Just east of this are five 3 story brick cotton warehouses (two built in 1918 and the other three by 1938) which are curved to parallel a railroad spur. In between the warehouses and the main mill is the original mill office. Its hip roof with dorners and a chimney resembles other houses and building in the mill village. A new one story brick building (1966), located farther to the east, has superceded the older office. The mill is surrounded by its village. Beginning with about 100 houses in 1903, it grew to 300 by the 1930s. It continues to be Bibb City, primarily a mill village, even though the company sold the houses in the 1960s.

City Mills Complex: The oldest remaining building at City Mills was erected in 1869 by Horace King, a noted black contractor who worked throughout Georgia and Alabama. With his local black craftsmen, King probably used trees from the immediate area and his construction methods could not be considered modern

(Continued)

[23]Some of the architectural descriptions for the Bibb, Eagle and Phenix, and Muscogee Mills draw from Stephen Goldfarb's National Register Nomination (draft) of these sites.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK 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
__1700-1799	__ART	✓ENGINEERING	__MUSIC	__THEATER
✓1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
✓1900-	__COMMUNICATIONS	✓INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES 1844 - 1900 **BUILDER/ARCHITECT** (See Continuation Sheet)

STATEMENT OF SIGNIFICANCE

The Chattahoochee River thunders across the fall line at Columbus, Georgia, dropping 125 feet within 2-1/2 miles and producing a potential energy of 99,000 horsepower.[1] This tremendous power made Columbus one of the earliest major textile centers in the South. The city's oldest three dams (1828, 1844, & 1900) and the five industries associated with these dams or the river -- City Mills (1828), Eagle and Phenix Mills (1850), Columbus Iron Works (1853), Muscogee Manufacturing (1868), and Bibb Manufacturing Company (1900) -- form the Columbus Historic Riverfront Industrial District. The sites within this district contain rare examples of early technologies utilized to transfer the power of the river to manufacturing. In addition to their engineering importance, these mills have both historic and architectural significance.

Within the South, the best surviving concentration of 19th and early 20th century hydro-mechanical and hydroelectrical engineering systems relating to both grists and textile mills is located within a 2-1/4 mile area along the banks of the Chattahoochee from the Eagle and Phenix powerhouses to the Bibb dam. The industries and dams within the Columbus Historic Riverbank Industrial District physically document the evolution of hydro-technology in general and show specifically how it developed along this river. The dam site shared by Muscogee Mills and the Eagle and Phenix Mills dates from 1844 and has been through four different configurations. Some aspects of each stage -- old raceways, flume openings, bridges for mechanical drive shafts, and supports for rope drives -- are still visible. In 1880, this dam represented one of two major waterpower developments within the South.[2] In the same year the Eagle and Phenix, using

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[1] 36th Annual Report of the Railroad Commission of Georgia, 1908, 25, Georgia Department of History and Archives, Atlanta.

[2] The 1880 census rated the amount of waterpower (hp per square mil) used in every county in the United States on a scale of one to six in ascending order. Muscogee (Columbus) and Chesterfield (Richmond, Virginia) were the only counties south of New York state to rate a "five," (15 to 30 hp per square mile). The only sixes (over 30 hp per square mile) were in Massachusetts and Connecticut. Herman Hollerith, "Statistics of Power Used in Manufacturing," in Tenth Census, Manufactures, 1880, Map No. 2, facing p. 6. The Eagle and Phenix dam represented the only really developed water power site in the county in 1880.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

(See Continuation Sheet)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

UTM REFERENCES

	ZONE	EASTING	NORTHING
A			
B			
C			
D			

VERBAL BOUNDARY DESCRIPTION

(See Continuation Sheet)

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

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

John S. Lupold, Associate Professor of History — February 10, 1978

ORGANIZATION — DATE

Columbus College — (404) 568-2263

STREET & NUMBER — TELEPHONE

Columbus, Georgia 31907

CITY OR TOWN — STATE

12 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

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST: DATE

KEEPER OF THE NATIONAL REGISTER

GPO 892-453

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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Mill Locations:

Columbus Iron Works
800 block Front Avenue
901 Front Avenue

Eagle and Phenix Mills
Front Avenue

Muscogee Mills
Front Avenue

City Mills Company
9 18th Street

Columbus Plant of the Bibb Company
1st Avenue & 38th Street

Continuation Sheet: Columbus Item No. 4 Page one

Owners:

Columbus Iron Works:
800 block Front Avenue:
Columbus Consolidated Government
10th Street
Columbus, Georgia 31901
901 Front Avenue:
W. C. Bradley Company
1017 Front Avenue
Columbus, Georgia 31901

Eagle and Phenix Mills:
Reeves Brothers, Inc.
54 Worth Street
New York, N. Y.

City Mills:
Mr. Lloyd Bowers
City Mills Company
9 18th Street
Columbus, Georgia

Bibb Mill:
The Bibb Company
P.O. Box 4207
Macon, Georgia

for 1869. The heavy timber framing was hand-hewn and mortise-and-tenon jointing was the rule. Although the company has concreted the floor (1915), added a new roof, and sided it with corrogated tin (1940s), King's original building techniques are still obvious. Several of King's bridges are still in existence, but the "Corn mill" is the only identifiable building erected by this noted black craftsman. The building no longer functions as a mill. With World War II profits, the company removed the grinding stones and installed three 45 inch Leffel Samson turbines which drove a Westinghouse generator (312 KVA). None of this equipment still functions, but it operated in the late 1960s.

Just south of the corn mill is the flour mill, designed and erected by the Richmond City Mill Works, Richmond, Indiana. This 6 story brick structure and the 2 story brick warehouse just to the east (joined by an elevated bridge) exhibit a great deal of brick detailing: "pilasters" divide its bays (five by three) corbelled false parapets adorn their tops. These features seem to reflect the owners' intention of creating a first class establishment. The original lettering on the building is still maintained: "City Mills Company, Flour, Meal, Feed and Bran."

In 1908, a rubble masonry dam (still standing) replaced a wooden dam and powered a refurbished concrete wheelhouse containing three 62 inch Samson turbines (630 hp under 9 foot head). Inside the flour mill a new hurst frame held the main shaft running from the powerhouse and its four driving wheels. The latter leather belts turned and drove line shafting on the other five floors. The frame extended through the floor of the second story where it supported 8 runs of stones. To reduce possible damage to the building through vibrations, the frame was not bolted to the floor but rested on eleven wooden pads.

In 1919 the western turbine was connected to a General Electric generator (175 kilowatt) in a room directly above the wheel. This power was consumed by City Mills. Though it no long functions, this generator, its direct current exciter motor, governor, and switchboard all remain in place in this room. The eastern most turbine still functions and turns the hurst frame which drives a mechanical elevator and an auger connecting the flour mill and the old warehouse. All of these represent extremely rare survivals of turn-of-the-century milling and power transmission equipment. On the remaining floors of the Flour Mill are roller mills, grinders, sifters, and batch mixers which remain where they were when they were phased out of production after the 1940s.

Also built in 1890, the warehouse and wooden grain elevator were located 70 feet east of the flour mill to reduce the dangers of fire. Originally a rope drive system applied power from the turbines in the corn mill to the equipment in the grain elevator. In 1914 two additional stories were added to the warehouse and today the original warehouse and elevator are operated as a feed mill. Also in 1914, the company built a 100,000 bushel capacity concrete grain elevator. This relatively early concrete building stands empty today.

Muscogee Mill Complex: The Muscogee Mill complex is divided into two distinct areas. The first is south of 14th Street on old water lot #1, where Coweta Falls began operating in 1844, and the second is an entire city block north of 14th Street. By the 1880s George Parker Swift had filled the southern area with his first two mills and their support buildings, Space was limited on this original lot and Swift extended the river bank before he began to build. These first two mills (85 feet x 35 feet and 50 feet x 65 feet) are more typical southern mills of the period than the 200 and 300 structures Young was erecting at the adjacent Eagle and Phenix.

Muscogee Mills No. 1 and No. 2 are probably the most decorative and unique buildings within the entire district. Mill No. 1 was a relatively plain brick 4 story building, but its stairtower has a graceful belvedere topped by a weather vane. It still holds the original factory bell. Extending from the southwest corner of No. 1 is the wheelhouse, which marks the beginning of the original 1844 race. In this small building in 1882 an electric generator provided the first commercial electricity in Columbus. No equipment remains, but the building's configuration has not changed.

In front of No. 1 were the company's original offices and warehouses which were built by 1883. Northeast of No. 1 was Mill No. 2 an almost rectangular structure built to fill the remaining space on the original lot. Its facade is the most distinctive along Front Avenue and within the entire district. Five brick "pilasters" support a parapet richly adorned with various brick detailing. Each of the five windows in the four stories has an arch with a keystone engraved with a single letter. These stones spell out "Muscogee Mills Company." Swift was evidently proud of his textile mills. Mill No. 1 and No. 2 were joined by an "L" shaped open bridge. This connecting passage existed in 1883, as did every building in this lot. The only changes have been the dismantling of a boiler and smokestack and the addition of a modern, white asbestos-siding elevator shaft.

Mill No. 3, built across 14th Street from No. 1 and 2, is decorative also with clusters of miniature turrets at the upper corners of the facade and filigreed grills, but its style is more like standardized New England mill architecture of the period than No. 2. Mills No. 3 through No. 7 illustrate the evolution of mill architecture from the very decorative to the totally functional buildings. Mill No. 4 is located between No. 3 and the river but had no water rights. Mills No. 5 through 7 form a large "L" going east from No. 3 to the corner and then north as the complex grew. Internally, all of these mills form one unit.

Muscogee has incorporated two non-industrial structures into their plant. Inside the encirclement of mill buildings is the Mott House, an 1840s "three story, five bay, Flemish bond brick structure with a mansard roof and a central cupola" which is already listed on the National Register of Historic Places. It serves as company offices. On the northeast corner of Mill No. 7 is the city's original Carnegie Library building (1908) which has been connected to Mill No. 7 and serves as a machine shop.

Eagle and Phenix Mills: Originally the Eagle and Phenix Mills consisted of three main mills perpendicular to the river; a series of small support buildings, picker rooms, dye houses, and machine shops; and a row of company offices and warehouses (finished products and cotton) that ran along Front Avenue east of the mills. This arrangement gave a little separation between the functioning mills and the city itself. Unlike Muscogee, the Eagle and Phenix has built no new large mills since 1878. Instead, the company has added to the existing structures and combined smaller buildings to form larger ones. Still the basic identity of the three original main mills has been preserved. All of these are typical 19th century mill architecture with slow-burn wooden supports. The least modification has occurred to Mill No. 2 which now serves as a warehouse. It has been out of production so long that many of its windows are not bricked-up.

Mill No. 2 has been connected to newer buildings but both its front and rear facade reflect the original construction. Its stairtower initially had a collonaded belfry which has been removed. Mill No. 3 has been changed more than its two predecessors. When constructed, its two towers were in the center of its 300 foot length, one on the south and the other on the north. In the 19th century each of the three mills operated as a separate entity. Beginning at least by the 1940s, the company started concentrating the production of cloth in Mill No. 3 rather than continue the three separate operations. To accomplish this end, Mill No. 3 was expanded to the north in two stages (1940s and 1960s) and filled in an area that had been a courtyard. In the process Mill No. 3's northern tower was removed. The original exterior configuration of Mill No. 3 is still

easily discernible. On the interior, even where it opens into a new addition, the old mill can be identified by its massive walls and its original round wooden columns.

The area within the complex north of Mills No. 1 and 2 has changed the most. There Reeves Brothers has built a modern dye house around what was a small 19th century dying operation. In the process the integrity of most of the small buildings has been destroyed, but the original western facade of the 1880s dye house is clearly discernible as part of a large modern building. The connecting row of offices and warehouses along Front Avenue has changed the least since the 1880s. Most of them were built at different times from the late 1860s through the 1880s, and so the tone of the bricks and the style of each segment vary somewhat adding to the uniqueness of this almost continuous two block facade. Cast iron metal window pediments in the office building add a distinctive feature. From behind this facade rise two very tall octagonal smokestacks which gracefully taper near the top (one was built circa 1880 and the second circa 1900).

The remaining area which has experienced a minimum of change is the dam and raceway. Even though its configuration has been changed several times, it was never totally demolished in the process. Only those parts of the old which interfered with the new were removed, the rest was allowed to remain. The original western wall of the 1844 race, now north of the dam, is still visible in periods of low water. The two 1899 powerhouses from the top of the turbine shafts down are the same today. Another story was added in 1914 to the upper powerhouse and in 1919 to the lower on so electric generators could be attached to the turbines. These facilities have not been changed since that date and they still provide the company with as much as 80% of its power requirements, under ideal conditions.

Columbus Iron Works: The architecture of the Columbus Iron Works is typical for iron foundries. After a 1902 fire the entire two block plant was rebuilt, completed by 1907. Its most distinctive feature is a row of round windows used in the 901 Front Avenue building and in the power house. The northern block of the complex housed the corporate offices and a plow factory. Originally the western portion of the building was two sheds running east-west, but through the years the center area was covered by a roof forming one continuous structure. The southern half of the plant consisted of a continuous row of buildings running north-south along the western edge of the block. Two 300 foot bays extend from this base to the east. The bay in the middle of the block contained a machine shop while the one at the southern end was a foundry area. In the foundry a cupola furnace still remains. In the northwest corner of the southern block is the powerhouse. Within it are a D. C. generator, three A. C. motors, and an air compressor. These document how this company's

(continued)

electric power evolved from being produced by their own Corliss steam engine to coming on line, in stages, with a central station. The southern half of the Iron Works is now owned by the city and is being converted into a convention and trade center. The machine shop will be divided into smaller rooms, but the foundry will retain its original shape and its cupola furnace in its new function as a large display area or meeting room. In the 1880s the U.S. Senate Committee of Education and Labor investigated the impact of industrialization on society and Columbus, Birmingham, Atlanta, and Augusta were the only southern cities visited by the committee. The Columbus Iron Works is already listed on the National Register of Historic Places. This site is contiguous to the Columbus Promenade which features an outdoor historical museum and to the Columbus Historic District an area of restored 19th century homes.

power from that dam, became one of the first industries to use electricity for lighting.[3] The existing powerhouses at the Eagle and Phenix are operating museums of early hydroelectric equipment with nine turbines installed in 1899-1900 and electric generators installed in 1907, 1914-1915, and 1919-1920 still functioning today.[4]

At the site of City Mills, the original turbines, installed in 1895 and 1897, produced electricity for street cars and are still in place in the old Columbus Railroad Company powerhouse, the area's first hydroelectric station. Inside City Mills, a large waterpowered hurst frame (1908) still operates today and is believed to be the only one of its type within the South. The original dam at the Bibb Manufacturing Company supplied water to two powerhouses. One produced electricity, while the other turned a rope drive system which mechanically powered all the machinery in the initial Bibb Mill. This arrangement continued to operate a portion of the plant until it broke in 1954; the drive shaft and sheaves still remain. Also of technological significance, the Columbus Iron Works was one of the first companies within the nation to mass produce and market ice machines (ammonia absorption).[5]

The district is historically significant because Columbus (Muscogee County) was one of the earliest large scale textile centers in the South.

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[3]Annual Report to the Stockholders of the Eagle and Phenix Manufacturing Company for the Year 1883, Eagle and Phenix Company records. Charles F. Brush first demonstrated the practicality of the large-scale application of his D. C. arc light generator in 1879 one year before the Eagle and Phenix adopted it. Harold C. Passer, The Electrical Manufacturers, 1875-1900 (Cambridge, Mass., 1953), 19-21.

[4]John S. Lupold, J. B. Karfunkle and Barbara Kimmelman, "The Eagle and Phenix Mills," Historic American Engineering Record (HAER) Report, Summer 1977, (draft, 44-55); Eagle and Phenix Company Records.

[5]Karfunkle, Kimmelman, & Lupold, "The Power Station of the Columbus Railroad Company at City Mills Dam," HAER Report, Summer 1977, (draft, 3-7); Kimmelman, Lupold, & Karfunkle, "The City Mills," HAER Report, Summer 1977, (draft, 24-25); Kimmelman, Lupold, & Karfunkle, "The Columbus Plant of the Bibb Company," HAER Report, Summer 1977, (draft, 15-26); and Lupold, Karfunkle, & Kimmelman, "The Columbus Iron Works," HAER Report, Summer 1977, (draft 19-26).

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Development of textile mills started in the county as early as 1832 and in the city in 1844. By 1860 Muscogee County's textile output ranked second only to Richmond (Chesterfield County), Virginia. It surpassed both William Gregg's mills in Graniteville, South Carolina, and Augusta. (See Table I). During the Civil War, Columbus supplied more manufactured goods to the Confederacy (including steam engines from the Columbus Iron Works) than any city except Richmond.[6]

Of the four major southern textile producers, only the mills in Columbus were destroyed by the war. Despite the problems usually associated with the period of Reconstruction, Columbus entrepreneurs immediately rebuilt their industries using local investment. By 1880, Muscogee County led the South in textile production. (See Table I) The Eagle and Phenix was the largest textile

(continued)

TABLE I

Four Major Southern Textile Centers, 1860-1880

Measured By Value Of Cotton And Woolen Goods

	1860	1870	1880
Augusta, GA (Richmond County)	370,019	1,137,752	1,460,982
Columbus, GA (Muscogee County)	564,720	429,292	1,883,337
Graniteville, SC (Edgefield District, Aiken County)	342,411	973,000	1,630,037
Richmond, VA (Chesterfield County)	938,400	813,000	293,150

(SOURCE: Appropriate state (and county) tables in Manufactures volume of Eighth Census, 1860 ; Ninth Census, 1870; and Tenth Census, 1880. After 1880, the census only listed the total industrial product of a county rather than enumerating the value of the individual components)

[6] I.W. Avery, The History of the State of Georgia, From 1850 to 1881 (New York, 1881), 297; Diffee William Standard, Columbus, Georgia, in the Confederacy, The Social and Industrial Life of the Chattahoochee River Port (N.Y.1954)13-17.

operation in the South, and it served as an example to "New South" advocates of what could be accomplished with southern capital.[7] From 1880 until 1900 Columbus Mills gradually expanded. Then, with introduction of hydroelectricity, beginning with the Bibb Mill (1900), Columbus and Muscogee County became and remained at least until 1940 one of the two or three major textile producing counties in the South along with Greenville and Spartanburg, South Carolina.[8] Unlike Spartanburg and Greenville where the mills were dispersed throughout the county, in Columbus all the mills were concentrated within a 1-1/4 mile radius.

Several structures within the Columbus Historic Riverfront Industrial District are architecturally distinctive, but its most significant feature is a six block area along the west side of Front Avenue which contains only industrial and commercial buildings. About two-thirds of these buildings were standing during the 1880s and have been modified very little.[9] The remainder -- an addition to the Eagle and Phenix (1910), a small railroad freight depot (1902), and part of the Iron Works rebuilt after a fire in 1903 -- were constructed by 1910. All of these brick facades are different and yet they form an integral whole, partially because features such as round windows are repeated both in the

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[7]The company claimed to be the largest and the value of its product in 1880 was $1,500,000. While census data might be exaggerated, this statistic gives an idea of its size. Only one county -- Aiken, South Carolina -- produced more textile goods than the Eagle and Phenix. The total figure for Aiken County included more than one mill. Victor Clark called the Eagle and Phenix "one of the oldest and largest factories in that section of the country." Manuscript Census for Tenth Census, 1880, Manufactures, Table V, Muscogee County; Victor S. Clark, History of Manufactures in the United States (Washington, D. C., 1929), I, 185.

[8]The value of textile production was not given, but the total industrial product for the following counties in 1920 gives some indication of the relative size of their textile production. Spartanburg, SC $48,793,848; Muscogee (Columbus), GA $43,884,491; Greenville, SC $43,862,669; Richmond (Augusta), GA $38,266,654. Thirteenth Census, 1920, Manufactures, Table 51, Summary for the Counties, 1919.

[9]Determined by comparing the extant structures with Henry Wellge & Co., "Perspective Map of Columbus, GA, 1886."

Columbus Iron Works and the Eagle and Phenix. In between the Muscogee Mills to the north and the Columbus Iron works to the south are cotton warehouses which incorporated wrought iron and decorative brick work in their design. This long expanse of industrial buildings, located one block from the main commercial street, was atypical within early 19th century southern urban areas. It illustrates the city's commitment to manufacturing and the idea of a "New South."

At City Mills, the corn mill was built by Horace King in 1869. King, a black contractor, learned his trade while the slave of John Godwin. He freed King before the war and they continued to work together until Godwin died in 1859. After the war, King built many covered bridges and some wooden buildings throughout Georgia and Alabama. This structure at City Mills represents the only known surviving building built by this noted craftsman.[10]

History

Originally established in 1828 by the state legislature as a "trading town" at the Falls of the Chattahoochee, Columbus initially flourished as a commercial center with the river moving cotton from the interior to the port at Appalachicola, Florida. The falls which prevented further navigation also generated a tremendous amount of energy. With such an incentive this deep South town, only about 40 miles from the rich agricultural Alabama "black belt," began manufacturing immediately. By the end of 1828 the river powered City Mills, a grist mill, and a turning lathe. About three miles north of Columbus a series of islands divided the river, and a small branch along the east shore could easily be dammed. There in 1832 -- only ten years after the inception of Lowell, Massachusetts -- construction began on a small textile mill, Clapp's Factory, probably the third or fourth successful one in Georgia. The area was still a frontier and the Creek Indian War delayed the mill's completion until 1837.

The town council eagerly tried to establish factories within Columbus. It divided a portion of the riverfront into nineteen, 72 feet wide, lots (now occupied by the Eagle and Phenix Mills and Mills No. 1 & 2 of Muscogee Manufacturing Company) and sold these for a nominal sum to two entreprenuers, Josephus Echols and John H. Howard. They were required to build a dam and race to supply power to all the lots. In 1844, Howard and others began the Coweta Falls Factory (the forerunner of Muscogee) with 1100 spindles and 20 looms. This mill began before William Gregg's Graniteville operation or any of those in Augusta. The Augusta Chronicle used the Coweta Falls Factory as an

(continued)

[10]Columbus Daily Enquirer, 7 July 1869; Lorreto Lamar Chappell, "Horace King," typscript, Columbus College Archives; Kimmelman, Lupold, & Karfunkle, "The City Mills," HAER Report, Summer 1977, (draft, 2, fn 2-4).

example to hasten the completion of their canal and mill. In 1845, Farish Carter, the richest planter in Georgia, began constructing a six story building where he planned to use slaves to operate 10,000 spindles and 200 looms, but rising cotton prices kept the slaves in the fields and the building remained empty until the Civil War began.

During the antebellum period other industries began along the race: the Variety Works (textiles and dressing lumber) and Palace(grist) Mills in 1845, the Howard Factory in 1847, and the Eagle Mill in 1850. The latter was organized by William H. Young, a New Yorker who prior to 1850 had made a fortune as a commission merchant in Florida. In 1860, he acquired the faltering Howard Factory and the combined mills had 500 workers who operated 11,300 spindles and 282 looms making it the second largest in the states. These mills along the river in the middle of downtown Columbus impressed Frederick Law Olmstead during his 1860 visit. He called Columbus "the largest manufacturing town, south of Richmond, in the Slave States," and the census confirmed his observation.[11]

During the Civil War, Columbus supplied the Confederacy with textile products, gun carriage, cannon and shot, Indian rubber cloth, tents, military caps, uniforms, steam engines, and gun boats. On April 17, 1865, eight days after R. E. Lee's surrender, General James H. Wilson's troops burned every industry in Columbus except the grist mills.[12] Plans for industrial reconstruction

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[11]John H. Martin, Columbus, Georgia, From Its Selection as a Trading Town to Its Partial Destruction by Wilson's Raid in 1865 (Columbus, 1874), I, 96, 119, 127-28, 138, 147, 157-58, II, 36; Lupold, Kimmelman, and Karfunkle, "Water Power Development at the Falls of the Chattahoochee," HAER Report, (draft, 1-15); Richard Griffin and Harold S. Wilson, "The Antebellum Textile Industry of Georgia," (Unpublished manuscript), 151-55; Augusta Chronicle and Sentinel, 8 March and 3 May 1845; Athens Southern Banner, 9 November 1848; Scientific American, 29 June 1850; Hunts' Merchants Magazine, August 1850; Ralph B. Flanders, "Farish Carter, A Forgotten Man of the Old South," Georgia Historical Quarterly, XV (1931), 142-72; See Farish Carter's correspondence with J. B. Baird in Columbus, Farish Carter Papers, Southern Historical Collection, University of North Carolina, Chapel Hill; Ernest McPherson Lander, Jr., The Textile Industry in Antebellum South Carolina (Baton Rouge, 1969), 56-60; Frederick Law Olmsted, The Cotton Kingdom, A Selection. (New York, 1971).

[12]Standard, Columbus, Georgia, in the Confederacy.

began almost immediately. The relatively rapid rebuilding occured because of the continuity between the antebellum and postwar mills. Many of the same investors, managers, and laborers participated in both periods. In 1867, William Young initiated Mill No. 1 of the reorganized Eagle and Phenix Manufacturing Company where the Eagle Mill had stood. The pre-war owner of Coweta Falls Factory, J. J. Grant joined with George Parker Swift to form the Muscogee Manufacturing Company. Swift, a New Englander who had established mills in Upson County, Georgia, before the war, quickly became the dominant partner in the new company. Construction on Muscogee No. 1 began at the site of Coweta Falls Factory in 1868.

The Eagle and Phenix probably expanded more rapidly than any other mill in the South in the 1870s. Production began in its first mill (10,000 spindles and 135 looms) in 1863, a second one (15,000 spindles and 350 looms) in 1871, and a third one (20,000 spindles and 800 looms) in 1878. In a span of ten years, five of them during a depression, the company quadrupled its size. (By 1880 it had a total of 45,000 spindles and 1,540 looms.) While the entire complex produced the greatest volume of goods in the region, Mill No. 3 was probably the largest single factory in the South in 1878.[13] John Hill, the company engineer, designed it, installed its D. C. arc lights in 1880, and engineered a masonry dam in 1883 (which is still standing). He also invented an automatic sprinkler, and the company he formed to manufacture them became part of the Grinnell Sprinkler Company. Indicative of his skills, the organizers of the King Mill in Augusta hired Hill to design their new mill, the largest in that city. It resembles the Eagle and Phenix No. 3. Another Eagle and Phenix company officer, N. J. Bussey, helped to organize the Atlanta Cotton Mill in 1876, one of that city's first mills.[14]

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[13]John S. Lupold, "The Industrial Reconstruction of Columbus, Georgia, 1865-1881," (Paper read at the Georgia Historical Society Meeting in October of 1975); Lupold, Karfunkle, and Kimmelman, "The Eagle and Phenix Mills," HAER Report, Summer 1977, (draft, 12-26).

[14]Hill's son, John Hill, Jr., was a prominent textile engineer designing 35 large mills including some modifications on Bibb and Swift mill in Columbus. Columbus Enquirer-Sun, 9 October 1888, "Eagle and Phenix River Development," and Eagle and Phenix Mills Centennial," typescripts in the Eagle and Phenix Company records; Columbus Enquirer-Sun, 21 January 1898 (his obituary); Columbus Enquirer-Sun, 12 September 1876.

Visitors were impressed by the Eagle and Phenix Mills. In 1873 and 1874 Edward King toured the South and did a series of articles for Scribner's Monthly. In describing mill towns he said the one at Graniteville, South Carolina, "is as tidy and thrifty as any in the North, and there is none in the South which excels it in general aspect and comfort, unless it be that of the Eagle and Phenix Company at Columbus, Georgia." King was impressed by the mills and the prosperity in Columbus.[15]

During the 1880s, southern newspapers, Atlanta Constitution, Augusta Chronicle and Constitutionalist, and Charleston News and Courier, and periodicals like the Textile Record publicized the success of Columbus mills and particularly the Eagle and Phenix.[16] Not only was its size distinctive, but in contrast to the typical small southern mill which produced yarn, sheeting, and osnaburg, the

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[15]Edward King, The Great South, edited by W. Magruder Drake and Robert R. Jones (Baton Rouge, 1972), 347, 373-74.

[16]Atlanta Daily Constitution, 9 March 1880; Charleston News & Courier, 19 February 1879, 9 February, 14 August, 11 November 1880, 25 April 1881, 4 October 1882, 13 February 1883, 27 December 1883, 12, 17, 21, 22 March, 5, 12, 28 April, 4, 17 July 1884, 1 June 1886; Augusta Daily Chronicle and Constitutionalist, 8 February, 23 November 1879, 10 March, 8 May, 7 November 1880, 3 November 1881. (from an index prepared by Allen Stokes, curator, Manuscripts Division, South Carolina Library, University of South Carolina.) Textile Record, November 1886, June 1889; "Important Southern Cotton Mills, Factories of the Eagle and Phenix Manufacturing Company, Columbus, Georgia, Textile Record, September 1892. Although contemporaries were aware of the Eagle and Phenix, one of the classic secondary works, Broadus Mitchell's The Rise of Cotton Mills in the South, almost ignored Columbus. His only citation was in a footnote referring to an Atlanta Daily Constitution (9 March 1880) article that discussed the large-scale industrialization in Columbus. Thus, Mitchell knew about Columbus and failed to pursue the subject. Mitchell's primary thesis was that southern industrialization did not start until after 1880, and the example of the Eagle and Phenix certainly contradicted that idea. He concentrated on the Carolinas because he knew that area or since more records were available there. Mitchell was also an early practitioner of oral history and he talked to Carolina industrialists who naturally talked about the mills they started after 1880. The Rise of the Cotton Mills in the South, in Johns Hopkins University Studies in Historical and Political Science, Sec XXXIX, No. 2 (Baltimore, 1921), 78. In the 1880s the U.S. Senate Committee of Education and Labor investigated the impact of industrialization on society, and Columbus, Birmingham, Atlanta, and Augusta were the only southern cities visited by the committee. See Report of the Committee of the Senate Upon the Relations between Labor and Capital, and Testimony Taken by the Committee, (Washington, 1885), 588-648.

Eagle and Phenix fabricated 110 different varieties of woolen and cotton goods. During the Atlanta Exposition of 1881 knowledgeable textile men like George Draper found their way to Columbus and were impressed by Mill No. 3. One English manufacturer pronounced it "as perfect in all its appointments as any establishment in the world." In the 1890s, an Atlanta group secured control of the mill. Some of its weavers struck in March of 1896, and formed the first local of the National Union of Textile Workers in the South. From 1897 until 1900, Prince William Greene, a weaver from the Eagle and Phenix, served as president of that national union. The Eagle and Phenix went into receivership in June of 1896 and would be revitalized by G. Gunby Jordan, an earlier company officer. He made few changes except to build new powerhouses and to gradually electrify its power transmission system. The mills remained locally owned (W. C. Bradley after Jordan) and stayed essentially the same even after being purchased by Reeves Brothers, Inc. in 1947.[17]

While the Eagle and Phenix peaked by the 1890s, Muscogee Mills steadily expanded until the present. In 1880, Swift built his second mill. It filled the last remaining space in old water lot #1, and his future expansion would occur north of 14th Street on property without water rights. Mill No. 3 driven by steam began in 1887, and Mill No. 4 powered by electricity from the City Mills hydroelectric station started in 1904. The later additions of Mill 5 (1918), Mill 6(1928), and Mill 7(1950) filled almost an entire city block with buildings.

Capital and skilled entrepreneurs from both the Eagle and Phenix and Muscogee launched new textile mills. Two former Eagle and Phenix managers directed small textile mills (A. Clegg and J. Rhodes Browne) in the 1870s. In 1883, George Swifts's son helped to launch Swift Mills which eventually became as large as Muscogee.[18]

The president of the Eagle and Phenix, Gunby Jordan, was a major investor in the Bibb Company, a Georgia-wide organization. Encouraged by John Hill, Jordan convinced the company to develop the North Highlands dam site in Columbus. The site possessed excellent potential, but the river channel and

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[17]Price Lists, Eagle and Phenix, 18 July 1878 and 28 November 1879; Columbus Daily Enquirer, 1 September 1881; Melton Alonza McClaurin, Paternalism and Protest, Southern Mill Workers and Organized Labor, 1875-1905 (Westport, Conn., 1971), 129-33; Lupold, Karfunkle, and Kimmelman, "The Eagle and Phenix Mills," HAER Report, Summer 1977, (draft, 33-61).

[18]Karfunkle, Lupold, and Kimmelman, "The Muscogee Mills," HAER Report Summer 1977. Lupold, Kimmelman, and Karfunkle, "Water Power Development at the Falls of the Chattahoochee,"

surrounding topography necessitated a large investment and a sophisticated technological arrangement. This complex, interrelated project involved constructing a dam, two mills, a Bibb powerhouse, and one for the Columbus Power Company. The Bibb Mill used mechanical power from its powerhouse, and the Columbus Manufacturing Company (several blocks to the south) consumed some of the electricity produced by Columbus Power Company. Called the first large dam build in the South, its construction began in 1899 and was still incomplete when it partially collapsed under high water in 1901. William S. Lee served as chief engineer during the reconstruction. He later became the driving force along with James B. Duke behind the organization of Duke Power Company. Lee always credited his later success on his early experience in Columbus. A discussion of this facility and cross-section of its electric powerhouse were included in Daniel Mead's textbook, Water Power Engineering. The entire operation began in 1902. Bibb started as a rather typical mill approximately 300 feet in length and then added another 200 feet in 1915-1916. A 1920 addition increased its length to 1010 feet which housed about 125,000 spindles, supposedly, the largest textile operation under one roof in the United States.[19]

The pioneering development of the Bibb dam marked the beginning of the large-scale application of hydroelectric power to textile mills in this area of Georgia and Alabama. Responding to the availability of power, five additional mills were built in Columbus and all of the existing mills continued to expand through World War II. The new mills created more demand for power which led to new hydroelectric projects. In a 21 mile stretch north of Bibb, three more dams were built: Goat Rock (1911, 16,000 kilowatts), Bartlett's Ferry (1928, 30,000 kilowatts), and Oliver (1959, 65,000 kilowatts). These new dams produced textile expansion outside of Columbus. Until 1930 when it merged into Georgia Power the Columbus Electric and Power Company provided all the electricity to the rapidly expanding West Point Manufacturing Company mills in "the valley" (River View, Langdale, Shawmut, and Lanett, Alabama, and West Point, Georgia) and the Callaway Mills in the area of

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[19]Daniel W. Mead, Water Power Engineering (N.Y., 1920), 565-67; B. H. Hardaway, "Remarks on the Recent Failures of Masonry Dams in The South," Engineering News, 6 January 1902, 107-109; Karfunkle, Kimmelman, and Lupold, "Columbus Power Company Station at the Bibb Dam," HAER Report, Summer 1977, (draft 1-15); Kimmelman, Lupold, and Karfunkle, "The Columbus Plant of the Bibb Company," HAER Report, Summer 1977, (draft, 1-4, 15-16); James E. Brittain, A Brief History of Engineering in Georgia (Atlanta, 1976), 13; George B. Tindall, The Emergence of the New South, 1913-1945 (Baton Rouge, 1967), 72; Karfunkle, Lupold, Kimmelman, "The Columbus Manufacturing Company," HAER Report, Summer 1977.

LaGrange, Georgia.[20]

While textiles made Columbus an important manufacturing center, other significant industries utilized the power of the Chattahoochee. In 1828, the year the town was established, the first dam began powering City Mills. This grist mill was owned by Seaborn Jones, a prominent lawyer, entreprenuer, and planter from middle Georgia, who probably never acted as a miller. During the antebellum period this mill remained a small operation grinding corn and wheat on four runs of stones. The increased demand during the war probably depreciated much of its equipment. General Wilson's raiders did not burn any grist mills, but by 1869 the original building was either destroyed or completely delapidated. In that year Horace King built a new wooden "corn mill" which housed five runs of stones and the operation continued on a rather limited scale.

In the period 1890 to 1908 George A. Pearce greatly expanded the company's capacity. In 1890 construction began on a 6 story brick flour mill, a 2 story brick warehouse, and 5 story wooden grain elevator. In 1908 the old wooden dam was replaced with a masonry one, and Pearce installed equipment to utilize the new power. By the end of the expansion the company had 13 runs of stones in the corn mill, 8 larger runs of stones in the flour mill, 21 double roller mills (9 inch diameter), and a 52,000 bushel storage capacity. For the lower South, this represented a large milling operation. It dwarfed its rural competitors. City Mills, however, remained a small business. Plagued by unfavorable freight rates and by cheap competition from gigantic producers in the mid-West and small operations in the surrounding area, it never made large profits. As a result, the company never attempted to renovate or modernize. Thus, much of its original equipment remains exactly where it was installed.[21]

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[20]"South Develops Another Hydro Resource," Electrical World, 22 January 1927, 195-97; Lupold, Kimmelman, and Karfunkle, "Water Power Development at the Falls of the Chattahoochee," HAER Report, Summer 1977 (draft, 35-67).

[21]Kimmelman, Lupold, and Karfunkle, "The City Mills" HAER Report, Summer 1977, (draft, 1-11). Donald Gregory Jeane, Associate Professor of Geography at Auburn University, wrote his dissertation on "The Culture History of Grist Milling in Northwest Georgia," (L.S.U., 1974) and has toured grist mills throughout Georgia and Alabama. After examining City Mills in February of 1978, he believes that in terms of its age, its large scale, and its extant and operating equipment City Mills probably has no peer in Alabama or Georgia.

The Columbus Iron Works began as a small foundry in 1853. It evolved into a diversified company which supplied the other mills with its iron products and with other equipment from its mill supply division. After the Civil War it made hangers and bearings for line shafting in the Eagle and Phenix. Unlike the other mills the Chattahoochee did not power the Columbus Iron Works but the river played an integral role in shaping the evolution of the company. It built riverboats, and an important market for its stoves and agricultural implements was the farming area south of Columbus served by the riverboats. The Columbus Iron Works developed some capabilities which distinguished it from other medium-sized Southern iron foundries as a result of its involvement in the Civil War. In June of 1862 the Confederacy leased the facility. Under the guidance of James H. Warner, formerly Chief Engineer of the U.S. Navy Yard at Gosport, Virginia, the C. S. Naval Iron Works manufactured engines that drove at least fourteen gunboats of various sizes. Additional Confederate boats utilized iron fittings, boilers, and other machinery fabricated there. After the war the company continued to make steam engines. The technology developed during the war also enabled it to develop its most distinctive product the ammonia-absorption ice machine. By the 1880s, three companies had developed these machines and according to historian Oscar E. Anderson "one of the most successful of these" was produced by the Columbus Iron Works. For the next forty years the company sold this product throughout the nation, primarily south of the natural winter ice line, and in Latin America. After 1930 the company fabricated a typical line for a local foundry. In 1963 the Columbus Iron Works was dissolved and became part of the W. C. Bradley Company.[22]

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[22]Lupold, Karfunkle, and Kimmelman, "The Columbus Iron Works." HAER Report, Summer 1977, (draft, 13-41); Oscar Edward Anderson, Jr., Refrigeration in America, A History of A New Technology and Its Impact (Princeton N. J., 1953), 95 & 98.

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Builder/Architect:

Columbus Plant of the Bibb Company
Mill - Builder: Bibb Company
Dam (rebuilding 1902) - Engineer: William S. Lee
Dam (rebuilding 1902) - Builder: Hardaway Construction Company

City Mills Company
Corn Mill - Builder: Horace King
Flour Mill - Architect: Richmond City Mill Works, Richmond, Indiana
Flour Mill - Mill Wright: D.T. Sullenberger
Dam (1908) - Builder: Hardaway Construction Company

Muscogee Mills - Builder: Muscogee Manufacturing Company Fieldcrest Mills, Inc.

Eagle and Phenix Mills:
Mill No. 1 and No. 2 - Builder: William J. McAllister
Mill No. 3 - Architect: John Hill
Dam (1883) - Architect: John Hill
Powerhouse (reconstruction 1914 & 1919) - builder: Hardaway Construction Company
Powerhouse (reconstruction 1914 & 1919) - architect: Lockwood, Green

Columbus Iron Works - Builder: Columbus Iron Works Company

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Manuscript Collections:

George J. Baldwin Papers, Southern Historical Collection, University of North Carolina, Chapel Hill. (Baldwin served as president of the Columbus Electric Company, 1901-1906)

Farish Carter Papers, Southern Historical Collection, University of North Carolina, Chapel Hill.

City Mills Company Records: Minutes of Board of Directors' meetings, copies of Presidents' and Secretary/Treasurers' Reports, both manuscript and typescript, collected in volumes, from 1891 through the 1950s.

Columbus Electric Company Records (1883-1903), Columbus Power Company Records (1903-1922), and Columbus Electric and Power Company Records (1922-1930). All of these are held by the Georgia Power Company in Atlanta, Georgia.

Columbus Iron Works Records: A broken collection of ledger and accounting books, 1876-1897.

Eagle and Phenix Company Records: Annual Reports to the Stockholders, 1868-1892; Receivers' Reports, 13 June 1896, and December 1897; Stockholders List, 1870; Price Lists, 1878 and 1879; Unpublished Minutes of the Board of Directors, Executive Committee, and Stockholders' Meetings, 1906-1913; Records and drawings of the company engineer (R. D. Betts and Don Hildreth), 1899-present.

Pittman, Henry, "The Bibb Manufacturing Company: A Profile of Progress, People and Plants," (Unpublished manuscript, circa 1955).

Printed Materials:

"A 90-year-old Bibb Enters New Era of Progressiveness," American Textile Reporter, 1 May 1967, 15-17, 56-57.

Anderson, Oscar, Jr., Refrigeration in America, A History of A New Technology and Its Impact (Princeton: University of Princeton Press, 1953).

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Baker, C. T., "Twenty-five Years of Ice Manufacture in the South," Southern Power Journal, XXVII (June 1929), 130-43.

Bibb Manufacturing Company, The Story of Cotton (Circa 1930s).

Brittain, James E., A Brief History of Engineering in Georgia (Atlanta: Georgia Institute of Technology, 1976).

Clark, Victor S., History of Manufactures in the U.S. (New York: McGraw-Hill Book Co., 1929)

Copeland, Melvin T., The Cotton Manufacturing Industry of the United States (New York: A.M. Kelly, 1966)

Griffin, Richard W., "Ante-Bellum Industrial Foundation of the (Alleged) New South," Textile History Review, V (April 1964), 33-43.

Historic American Engineering Reports, prepared by John S. Lupold, Barbara Kimmelman, and J. B. Karfunkle, on Columbus Iron Works, The Eagle and Phenix Mills, Muscogee Mills, City Mills, The Columbus Railroad Powerhouse at City Mills, The Columbus Plant of the Bibb Company, and The Columbus Power Company Hydroelectric Station at the Bibb Mill, Summer 1977.

"Historical Review of the Rise of Mechanical Refrigeration," Ice and Refrigeration, January 1902, 13-19.

Hubbard, Charles L., "Rope Drives Still Hold Their Place in Industry," Southern Power Journal (April 1927), 48-52.

King, Edward, The Great South, Edited by Magruder Drake and Robert R. Jones (Baton Rouge: Louisiana State University Press, 1972).

London, Michael, "Reeves Brothers Completes Its New Yarn Dyehouse," Textile World, November 1954.

McLaurin, Melton Alonza, Paternalism and Protest, Southern Mill Workers and Organized Labor, 1875-1905 (Westpoint, Connecticut: Greenwood Press, 1971).

Mead, Daniel W., Water Power Engineering, The Theory, Investigation, Development of Water Powers (New York: McGraw-Hill Book Company, 1920).

Mitchell, Broadus, The Rise of Cotton Mills in the South, in Johns Hopkins University Studies in Historical and Political Science, Sec. XXXIX, No. 2 (Baltimore, 1921).

Olmsted, Frederick Law, The Cotton Kingdom, A Selection (New York: Bobbs-Merrill, Company, Inc., 1971).

Passer, Harold C., The Electrical Manufacturers 1875-1900 (Cambridge: Harvard University Press, 1953).

"Plant of the Columbus Power Company, Columbus, Ga.," Electrical World and Engineer, XXXIII (23 January 1904), 156-68.

Roberts, A.T., "Columbus: Typical of the South," Manufacturer's Record, 1925.

"South Develops Another Hydro Resource," Electrical World, 22 January 1927.

"Utilizing the Chattahoochee River Water Power," Manufacturer's Record, 1910.

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Boundary Description: The Columbus Historic Riverbank Industrial District consists of four non-contiguous areas. Starting in the north, the boundaries around the Columbus Plant of the Bibb Company begin at the intersection of 2nd Avenue and the western extension of 35th Street (the road to the Georgia Power facility at the North Highlands dam). From there it extends northward along the western edge of 2nd Avenue for about 1500 feet where it curves (in the same configuration as the railroad spur) on to Porter Street going west. It follows Porter Street to the intersection of Porter Street and River Avenue. From that point the boundary continues directly to the west until it reaches the Alabama-Georgia border (or the western high-water line of the Chattahoochee River). From that corner it follows that line southward until it intersects a line drawn due west from the original starting point.

The boundaries around the City Mill complex begin at the intersection of the extension of 18th Street going west into the City Mills Company and the railroad spur running north-south through the property. From that junction the boundary extends northward along the railroad track to a point 100 feet north of the concrete grain elevator (1914). From that point the line runs due west until it reaches the Georgia-Alabama border and then follows that line southward until it intersects a line drawn due west from the starting point.

The Muscogee Mills is divided into two portions by 14th Street and the 14th Street bridge. The boundary around the northern complex of the Muscogee Mill-begins at the northeast corner of the 14th Street bridge and run east along the northern edge of 14th Street until it reaches Broadway. It then proceeds northward along the westward edge of Broadway until it reaches 15th Street. From that intersection in runs directly west to the highwater line on the eastern bank of the Chatthoochee River. It then follows that line until it returns going south to the original starting point. The boundaries around the contiguous southern Muscogee Mills (No. 1 and 2) and the Eagle and Phenix Mills starts at the intersection of Front Avenue and 12th Street and runs north along the western edge of Front Avenue to 14th Street and then west along the southern edge of 14th Street, south of the bridge, to the Alabama-Georgia border. From that point it follows the high water line southward until it intersects a line drawn due west from the starting point.

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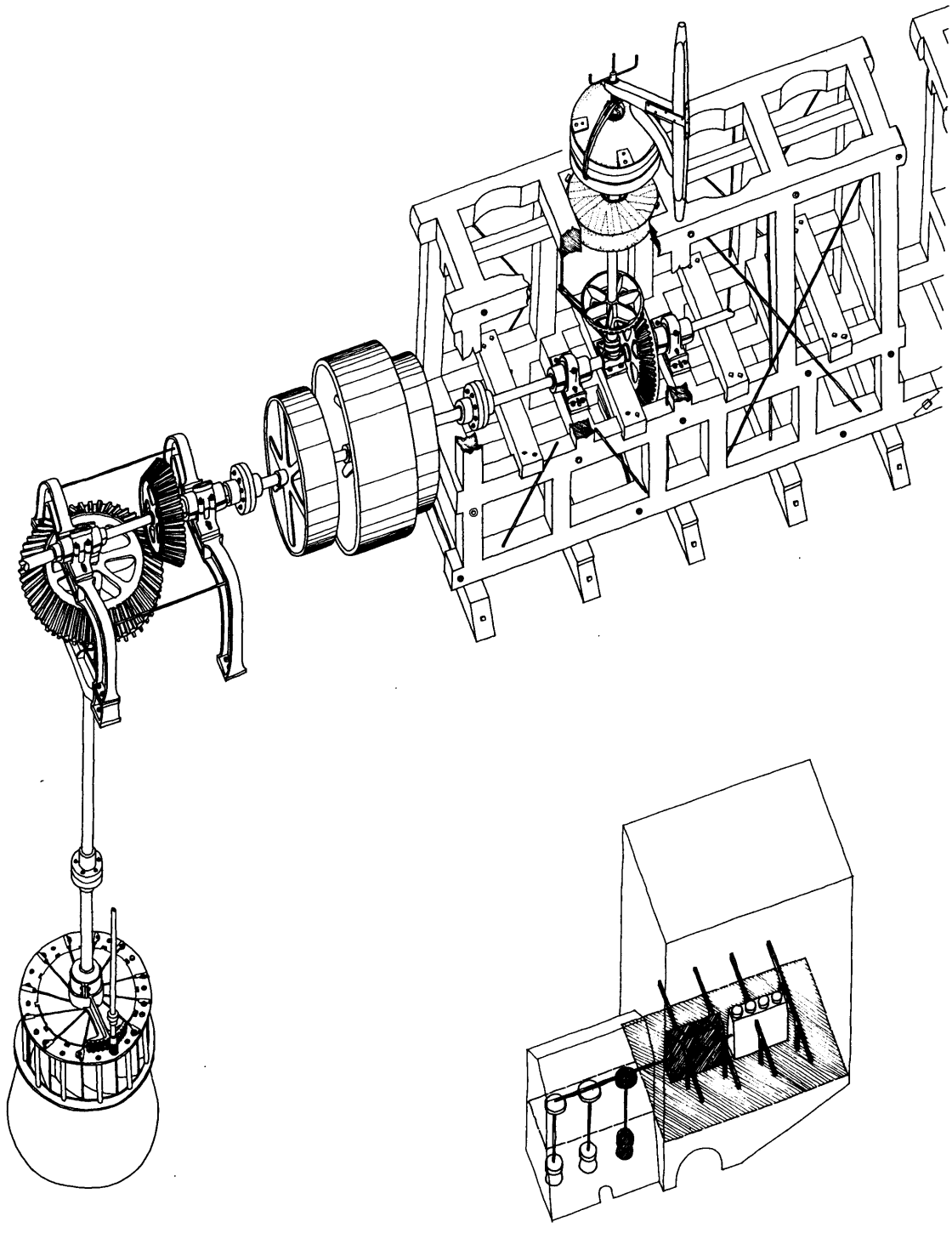
The boundaries around the Columbus Iron Works begin at the intersection of 8th Street and the western edge of Front Avenue and proceed northward along the western edge of Front Avenue to Dillingham Street. From that intersection it runs west along the southern edge of Dillingham Street to Bay Avenue and then south along Bay Avenue to where it intersects a line drawn due west from the starting point. The railroad and its trestle running east-west through the complex should be excluded from the district.

Original Eagle Mill (1851).

Photocopied from "Eagle Mill Centennial," company pamphlet, 1966.



City Mills: Isometric of tubines, main power drive shaft, Hursting frame and mill stone.

Daniel Wheeler, delineator, 1977.