National Register of Historic Places Registration Form

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This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in Guidelines for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets Tune all entries

(Form 10-900a). Type an entries.							
1. Name of Property		· · · · · · · · · · · · · · · · · · ·					
historic name Fox River Pape	r Compa	ny Historic Distrie	et				
other names/site number Ravine Mi				11			
2. Location							
street & number 405-406, 415 So	uth 01d	le Oneida Street		not for publication N/A			
city, town Appleton				vicinity N/A			
state Wisconsin code WI county Outagamie code 087 zip code 54911							
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3. Classification							
Ownership of Property Category of Property Number of Resources within Pro							
X private	buildi		Contributing	Noncontributing			
public-local	X distric		3	buildings			
public-State							
public-Federal	struct		1	0 structures			
			*	objects			
			<u> </u>	0 Total			
Name of related multiple property listing	. .		Number of contri	buting resources previously			
	j .			onal Register <u>none</u>			
none			insted in the Matit				
4. State/Federal Agency Certifica	tion						
As the designated authority under the							
X nomination request for determ							
National Register of Historic Places							
In my opinion, the property X meet	s 🔄 does	not meet the National Reg	ister criteria. 📖 See	continuation sheet.			
X	1 h			3/7/2			
Signature of certifying/official				Dave L			
State Historic Pre	servati	on Officer-WI					
State or Federal agency and bureau							
In my opinion, the property meet	s 🛄 does	not meet the National Rec	jister criteria. 🛄 See	continuation sheet.			
Signature of commenting or other officia	l			Date			
State or Federal agency and bureau							
5 Matter al Dank Camilaa Cartifica	A!						
5. National Park Service Certifica	ITION			1 1 2 2			
I, hereby, certify that this property is:		ji .	Entered				
Dentered in the National Register.		-An A	National	. Register			
See continuation sheet.		Xllares Jy	n	4/19/90			
determined eligible for the National		V U		/			
Register. See continuation sheet.							
determined not eligible for the							
National Register.							
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removed from the National Register.							
other, (explain:)							
		1					

Signature of the Keeper

Date of Action

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)					
INDUSTRY/PROCESSING/EXTRACTION:	INDUSTRY/PROCESSING/EXTRACTION:					
manufacturing facility	manufacturing facility					
	NOT IN USE					
	· · · · · · · · · · · · · · · · · · ·					
7. Description	· · · · · · · · · · · · · · · · · · ·					
Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)					
	foundation Limestone					
<u>Other: Astylistic Utilitarian Building</u> Italianate	walls BRICK					
	roof Tin					
	other WOOD					

Describe present and historic physical appearance.

The Fox River Paper Mill complex is located on the Fox River flats, an early industrial area of Appleton initially developed in the 1850s. It sits adjacent to the Lake Bridge along the west bank of the Fox River. It is bounded on the north by Water Street. on the west and south by the Fox River. and on the east by the Lawrence University power plant. It once occupied a narrow strip of land separated on the north from Water Street by the Water Power Canal which has been filled as far east as South Oneida Street. The complex consists of three building groupings which contain one or several connected original, dominant buildings and attached additions thus totalling three resources. The water power canal which runs north of the mill composes the fourth resource. All buildings were originally oriented to the north or Water Street. Two complexes lie on the west side of South Oneida Street and Lake Bridge; the adjoining Ravine and Rag mills to the north and the Lincoln Mill to the south. The third complex, the Fox River Mill, lies directly to the east of South Oneida Street. The Rag and Fox River mills are connected by tunnels both under and over South Oneida Street. Oneida Street once formed the main artery through Appleton connecting Menasha and Green Bay (McLandress 1983: 8).

The three mill complexes follow the common astylistic utilitarian mill design of the late nineteenth and early twentieth centuries. Each of the major buildings housed an operation running a single Fourdrinier machine. They are composed of long, comparatively narrow, interconnected buildings. The resource follows typical mill spatial composition. The walls are horizontally and vertically organized by their window shape and size and regular placement. The proportion of window to wall space is relatively higher than in large commercial buildings. Roof pitch is generally flat or low. Decorative details appear only on prominent elements such as window lintels, cornice lines, and towers (Lusignan 1986: 6-4; Gottfried and Jenson 1985: 11; Maddex 1985). Except for additions, this detailing generally follows the Italianate style despite the spread in building age between 1883-1884 and 1892-1893.

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The mill complex contains four mill buildings constructed during three building phases. Each is described under its historic name.

Ravine Mill

The 1883-1884 (POST-CRESCENT 1883 [4/12]; 1884 [2/4]) Ravine Mill (building A), the first mill complex, has rectangular massing and is horizontally organized through the rows of windows with segmented lintels and its elevated corbelled cornices along the north and west sides. The addition which houses the turbines was added to the west end of the building between 1895 and 1901 (Sanborn-Perris Map Co. 1895; 1901).

The Ravine Mill is 88 by 99 feet and contains four levels including the basement. Exterior masonry walls are composed of a cream brick in a common bond laid on a random rubble limestone foundation. Tin and asphalt cover the flat roof. Three rows of eight windows light the three levels above the basement on the north side. Windows are double hung and generally contain 8/12 lights. Sills are constructed with smooth-faced, ashlar limestone. The west side contains a similar window configuration above the two brick additions. The additions stand on poured concrete foundation and display rectangular windows with cement sills and lintels. The south side of the Ravine mill has experienced considerable window alteration and displays little original fenestration. Remaining original windows parallel those on other facades. Entrances are unelaborated. Interior spaces are generally open. Much of theinterior construction has suffered alteration. The original brick arches remain in level 1 or the basement level. They are supplemented with steel columns and span between the later concrete floor and ceiling. The interior wood framing has been removed from levels 2 through 4 and substituted with steel columns and beams with concrete floors and ceilings except on levels 3 and 4 which retain their wood ceilings and floors. The additions along the west side currently house operating turbines. Originally, water from the water power canal entered the west elevation at two locations to operate machinery on level 1. The entrance remains visible from the exterior. The Ravine Mill contained one Fourdrinier paper machine and machinery to prepare the rag pulp and finish and ship the paper products.

Rag Mill

Placed across the east elevation of the Ravine Mill, the Rag Mill (building B) replaced a former flour mill in 1892-1893 (POST-CRESCENT 1892 [9/10]; 1893 [1/14]). It closely resembles the Ravine mill. Its facades and elevations are organized with rows of rectangular, multi-light windows with segmented lintels, an elevated corbelled cornice along the north and east sides and small wood brackets along the south facade.

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The Rag Mill (building B) stands five levels high including the basement. Levels 3 and 4 are approximately equivalent to level three in the Ravine Mill (building A). It measures 99 feet north-south and 110 feet east-west. Like the other mills, it is composed of masonry walls of cream brick laid in a common bond which rest on a primarily coursed rubble stone foundation. The flat roof is covered with tin. The north or front facade is composed of four rows of fourteen double hung windows. They are 15/15 lights on the fifth and fourth levels and 10/10 lights on the lower levels. Sills are composed of rough-faced ashlar limestone while lintels are segmented. The entryway on the second level was modified in the recent past. The composition of the east side is similar to the north with its four rows of twelve windows. Windows on the fifth level at the south end have been blocked. Additionally, there is an ashlar stone watertable. The steel cladded breezeway to building C stands in the same position as the original walkway at the fourth level on the south corner of the east facade. Original openings across the rear or south facade remain on the third to fifth levels and parallel the other two sides. Windows, especially on the fifth level, have been covered. Some of the openings have been replaced by modern steel loading bays on the second level.

The primary function of the Rag Mill was the preparation of rags for paper machines in the Fox River Mill. Much of the interior construction of the Rag Mill, a wood post and heavy beam framework and wood floors and ceiling, is original. On the second, third, and fourth levels, steel beams occasionally supplement the wood framing. The brick housing for a turbine and a concrete vat which rises to the third level are located in the center of the north wall adjacent to the power canal and in the southwest corner respectively. Recent partitions separate the office of Williamhouse in the northest corner of the second level.

Lincoln Mill

The 1888-1889 (POST-CRESCENT 1888 [6/28]; 1889 [10/24]) Lincoln Mill is distinguished by its grouping of long, narrow buildings around a courtyard which opens to the north. The long east-west center wing is flanked on either side by two north-south wings which present the corbelled cornice returns of their gable to the south and north. Windows in the gables are round arched as are windows of the narrow roof dormers. There are also circular or semicircular windows in the gable ends. Other windows have segmented lintels. The square tower along the northeast side carries a corbelled cornice below its mansard roof. A row of three windows with rounded lintels pierce the facade of the tower immediately below. The center widow stands above the other two, creating a palladian window motif.

The original Lincoln Mill once abutted the mill race on the south side which

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was formed by a wall separating it from the main channel. It directed water to the power house along its southeast corner before the dam was relocated to the east and the mill race filled. The mill is composed of a long, narrow section (M) flanked by two wings (L and N) on the east and west. A third wing (0) runs west from the east wing. Section P north of section O is also original. Additions include sections Q and R erected between 1895 and 1901 and S constructed between 1911 and 1934. Several frame walkways on the north side represent replacements of the original (Sanborn-Perris Map Co. 1891; 1895; 1901; 1934). Finally, a one story, steel attached shed sits north of these three additions, and a post-1934 tower has been added to the west elevation. The original portion of the buildings was four and a half levels including the basement but exclusive of the tower (U) which rises to 6 levels, the power house (T) which reaches three and a half levels, and section P containing two levels. Addition S is four levels while Q and R reach two levels.

Overall, Lincoln Mill occupies a 230 foot north-south by 260 foot east-west area excluding the south power house wing which measures 25 by 47 feet. The original mill is composed of a masonry wall of cream brick laid in a common bond. Excluding the steel addition, earlier additions are built of a redder brick and concrete block. The structure rests on a random rubble limestone foundation which joins the foundation with a smoothed surfaced, ashlar limestone watertable. More recent portions are placed on a poured concrete or concrete block foundation. Asphalt and tin cover the gabled roof. The north tower has a mansard roof, and added west tower is covered by a flat roof.

The north or front facade of Lincoln Mill is composed of the gable ends of the east and west wings, the tower, the original walls of the two and four-and-a half level sections O and P to the west, and the walls of the additions which fill the original courtyard behind section 0. Thus, it is a complex, rather rambling facade, horizontally composed of rows of double-hung windows with smooth-faced, ashlar limestone sills and segmented lintels. The windows are largely boarded over. The top story of the gable ends and the tower display one or two windows with segmented lintels flanked either by smaller, similar windows or circular windows. The west elevation is composed of three rows of ten windows similar to the north side. Until recently the location of a two story addition which is now razed, this elevation contains quite a few windows on the lower two levels and the south end which are filled. A five story brick tower was placed in the center of the elevation after 1934. Four narrow, gable roof dormers with round-headed windows pierce the upper story. The south facade presents the gable ends of the two wings (sections L and N) and of the power house (section T) and the long wall of section M. This facade is pierced by three long rows of windows with segmented lintels similar to those of the north side. The west gable contains rounded lintels flanked by circular windows, and the east one displays a single, large semi-circular window. Some of the 12/12 lights remain in the power house. Ten narrow.

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gabled roof dormers pierce the roof. They retain their 6/6 lights. The surviving head race runs east under the power house once turning seven turbines (Sanborn-Perris Map Co. 1895) and exits under three segmental arches. The east facade, section N, which abuts the Lake Bridge is also composed of three rows of windows with segmented lintels. Windows are covered. Dormers similar to the south facade also pierce this roof. The central one contains a double rounded arch window.

Broad spaces whose size often coincides with that of the wing compose the interior. Heavy post and beam construction supports the first floor of the west wing (section L). Water once entered the south wall from the race into the basement area to operate unidentified machinery. In section M. brick arches which rise through the first floor support the floors of the second and third levels, the location of the paper machine. Corbelling along the arches support heavy wood beams. The walls of the nine brick tanks or drainers (Sanborn-Perris Map Co. 1891) rest on the floor of level 1 and rise through it into the second level in the east wing (section N). Section O of the original building has a clear timber span while P is supported by wood posts and beams at level 1. Additions are supported primarily by steel posts except for section R which is a clear span. Steel framing occurs in the additions above the first level. Much of the original levels above the basement are supported by wood post and beam construction. Wood floors and ceilings dominate although some concrete flooring has been added. Original variations include the steel tie rods which suspend the third and fourth level from the fifth level roof beams in sections L. M. and N. Post and beam construction support the second level ceiling in section L, and brick corbelling on piers along the walls also support the wood beams of sections M and N to create a clear span on the fourth level. Riveted steel trusses now support the clear span of the third level in section L. Rolled steel beams across the clear span in the third level of section M are original. Roof supports in the original sections are composed of wood framing. Generally, the rag pulp was prepared in the east wing (N) for the paper machine on the third level of the middle wing (M) whose product was finished in the west wing (L).

Fox River Paper Mill

The Fox River Mill on the east side of South Oneida Street was constructed during the same 1892-1893 period as the Rag Mill to its immediate west. The original portion consists of 5 sections denoted as buildings C, D, E, F, and J. Its north and south facades are visually irregular in roof line and window placement. Additionally, these facades fail to align north-south thus adding to the asymmetry of the facade. Facades and elevations are organized by rows of rectangular windows with segmented lintels and by corbelled cornices. Buildings C at the west end and F at the east end also display small brackets along their gable eaves. Building J whose gable faces south is characterized

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by a corbelled cornice return. The flat roof tower along building E at the northeast side of the complex displays a series of three, two, and one marrow windows with segmented lintels from level six to four. Between 1911 and 1934. building I with stepped cornice replaced an earlier section. Building K to the west of J was added sometime after 1934 (Sanborn-Perris Map Company 1911; 1924/1934; 1958). Building H was erected in 1926 and building G constructed sometime between 1924 and 1926. Building V, the power house, was erected in 1928. The complex grew eastward absorbing the pre-1883 garage building (W) by 1934 (Sanborn-Perris Map Company 1883; 1924/1934; POST-CRESCENT 1940 [10/24]). Their facades are organized by rows of rectangular openings and elevated cornices (Gottfried and Jenson 1986: 239, 198-99, 206, 232; Whiffen 1969: 69; Godfrey 1986: 2-6; Garfield and Wyatt 1986: 3-10; Panek 1976: 18-1-2).

Although the original five buildings of the Fox River Mill on the east side of Lake Bridge were constructed at one time, variations are sufficient to warrant a brief discussion of each separate section. Building C rises four levels and encompasses a 48 foot east-west by 98 foot north-south space. Its masonry walls of cream brick are laid in a common bond and rest on a random rubble limestone foundation. Asphalt shingle covers its gently pitched roof. Three rows of 6 openings each along with the bracketed corbelled cornice compose the front or north facade. The original entrance has been bricked and a second created adjacent to it. Double hung windows contain 15/15 lights on levels three and four and 10/10 on level two. Sills are rough-faced, ashlar limestone. The west elevation is similarly composed with twelve windows in each row and the addition of a watertable. Four rows of six windows with a bracketed cornice compose the south side. Windows lights have a 15/15 arrangement except for the second level which is 10/10. Some of the windows on the fourth level are blocked and two windows are either altered to a door or modified for loading. Water from the tail race beginning at the Water Power Canal once exited beneath. The east elevation is composed like the front facade with three rows of windows ending at the building's union with building D at which is located a post-1934 five story elevator tower. Cutting, storage, and shipping of paper occurred in building C (Sanborn-Perris 1895; 1911). Interior spaces are primarily open. Much of the original interior support system, the post and beam construction with wood flooring and ceiling, remains. The stone casing for the turbine at the north end of level 1 adjacent to the power canal remains. Interior wood partitions separate the north end on the second level. Steel columns and north-south steel beams have been substituted for wood elements on levels 3 and 4. However, the timber truss running east-west remains.

Building D abuts buildings C to the west and E to the east. It contains four levels and encompasses an 38 foot east-west by 169 foot north-south space. Sometime between 1911 and 1934, level four was added to D (Sanborn-Perris Map Co. 1911; 1934) but it continues to maintain the architectural lines of the adjacent buildings. Dormers similar to those on the Lincoln Mill pierced the

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original roof. The building is composed of cream brick masonry walls laid in a common bond. A random rubble limestone foundation supports the building. The flat roof is covered with tin. Its three rows of 21 windows and corbelled cornice compose the front or north facade. Double hung windows contain 15/15 lights on the third and fourth levels and 10/0 lights on the second level. Sills are rough-faced, ashlar stone. The lower portion of the second level is obscured by concrete loading docks added after the original construction. Α similar fenestration along the south facade is obscured by several later additions up as high as the third level (buildings K and additions between J and D). Originally, building D contained the paper machines on level 3 and drainers in level 1 (Sanborn-Perris Map Co. 1895; 1911). Brick vaults and wood post and beam construction support the floors of levels 2 and 3. Corbelling along the brick walls support second floor beams. The stone housing for the drainers occurs Between brick vaults. The arches in level 1 rise through level 2. Corbelling again supports the level 3 floor. The floor and ceiling are wood except for the north side which is concrete. Wood supplemented with steel beams form a clear span to support the level four floor. Flooring is both wood and concrete and the ceiling is wood deck on level 3. This level also includes partitions on the north and east side. Steel joists support the roof system on level 4 which was added after 1911. Floors are both wood and concrete, and the ceiling is wood.

Placed between buildings D, G, and F on the west, east, and south sides, building E rises five levels with its tower in the northwest corner reaching seven levels. The building measures 48.5 feet north-south and 68 feet eastwest which includes the 12 by 18 foot tower. A cream brick laid in a common bond composes the masonry walls. Its foundation is a random rubble limestone. The comparatively steep gable roof is covered with asphalt shingle. Its west end adjacent to the tower is truncated, and the tower itself has a flat roof. Once fenestrated with three rows of six double hung windows, the north facade is now covered by a concrete loading dock up to the third level. Some windows remain intact below the roof of the loading dock. Third and fourth floor windows have 15/15 lights and the second level has 10/10 lights. The series of 3, 2, and 1 windows on the north side of the tower as well as those on its other sides and levels are blocked. Sills are rough-faced, ashlar limestone. With contemporary and subsequent additions, there are few windows piercing other sides. Corbelled cornices complete the building design.

Water from the power canal originally entered the north side of building E to operate a turbine encased in a stone housing. The tower contained the elevator and tank on the seventh floor for the sprinkling system. The wheel house occurred on level 2 while preparation of rags for the paper machine and storage was performed on upper levels. The system of brick vaults continues from building D into E with the supplementation of wood beams with steel beams in building E. Supports above the second level have been altered. On the third level, steel I columns replace wood posts and support wood beams.

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Supporting a clear span, the wood beams supporting the ceiling of level 4 is suspended from the original steel trusses tied to the level 5 roof framing. As on other levels, the floor is concrete. However, while the ceiling on level 4 is wood, the others are concrete. This construction is original (Sanborn-Perris Map Co. 1895). On level 5, wood trusses with wood framing carrying the steel tie rods support the roof. The floor and ceiling are wood. The upper levels of the tower are constructed of wood post and beam construction. At least some of the machinery which operated the spinkling system still remains on level 7.

Building F abuts building E on its north and addition I on its west. It is connected to building G by a frame walkway at the second level and a tunnel on the first. Building F contains three levels enclosing a space of 70 feet east-west and 79.5 feet north-south. The building is constructed of a cream brick masonry wall laid in a common bond resting on a random rubble foundation. A low pitched, gable roof with tin cladding covers the building. Addition I covers much of the fenestration on the west side. On the south side, a row of nine windows on levels three and four and a short row at the west end of level 2 organize the facade. They are double hung windows with rough-faced, ashlar limestone sills and 15/15 lights. A bracketed, corbelled cornice completes this facade. A similar window configuration occurs on the east elevation. On the interior, level 1 contains two large masonry bleaching vats on a concrete floor. It is open through the second level. Wood and added steel beams support the concrete ceiling. The roof over the third level which contained eight beaters is carried by round steel columns and framing of timber with steel straps.

The fifth building in the original complex, building J, initially communicated with the remainder of the mill complex through building I which has been considerbly modified or completely replaced. It contains one level which encloses a 43.2 by 66 foot horizontal and 20.75 to 28.3 foot vertical space. Masonry walls are constructed of a cream brick laid in a common bond upon a random rubble limestone foundation. The gable roof is covered with asphalt shingle. A row of four windows with rough-faced ashlar sills under a single window above occupy the south gable end. The windows are now covered. It also has a corbelled cornice return. Additions on the north and south block any original fenestration on these walls. This section once contained steam boilers which are no longer extant. Steel columns and a timber truss with steel tie rods support the roof above the concrete floor. The floor is concrete and ceiling is wood. The small single story, 29 by 28 foot brick addition to the northwest, J', once contained the power pumps. It was added between 1901 and 1911.

Building I, an extention to building J, began as a one story, brick power plant and occupied the south portion of its east wall. It connected building J to F. It was severely altered or replaced between 1911 and 1934 by

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extending the single story upward and to its rear or north (Sanborn-Perris 1895; 1911; 1934). It is now a 45 by 75 foot, one story, fire proof brick power plant on a concrete foundation. The building is open through what is generally level 2 in the surrounding buildings. It is covered with a flat roof and asphalt shingles. The parapet of the west side is stepped. On the south facade, the two tiers of windows are square-headed with concrete lintels and sills and are blocked. Wedged between buildings D, F, and J, building I lacks fenestration on the east and north walls and possesses only one window on the west wall.

Building K was placed between buildings C, J, J', and D sometime after 1934. Wedged between these buildings, it has irregular dimensions with a maximum extent of 85 feet east-west and 65 feet north-south. Its flat roof is covered with asphalt shingle. Its one story concrete block wall lacks fenestration. Post and beam construction rather than steel provide the interior framing.

Located to the east of the original complex, Building G was erected well after the first building phase between ca. 1924 and 1926. It contains three levels and measures 59 feet east-west and 99 feet north-south. Its walls are composed of a cream brick laid in a common bond and are supported by a poured concrete foundation. The gently pitched gable roof is covered with asphalt shingles. Two rows of nine double hung windows compose the north or front facade. Level three windows are composed of 8/8 and level 2 windows of 12/12 lights. Rectangular lintels and sills are concrete. An elevated, corbelled cornice capped with red tile completes the front facade. A recent steel cladded, single story dock interrupts part of the front facade. The third and second level fenestration is carried around to the other three sides but is interrupted by two walkways on the third level at the west end and building H on the east side. The first level is also fenestrated on these sides with 8/8 lights. However, in some cases the glazing has been altered along these sides. The south facade displays nine windows along each row. Building G', a one story, 23.5 by 38 foot brick building, unites G to Building E. Building G functioned as a machine shop. On the interior, steel I columns support steel beams and joists on the first level. Floor and ceilings are concrete. While level 2 is a clear span supported by a steel beam, level 3 has steel I columns and steel framing. The floor and ceiling of this level is wood.

Although erected somewhat later than building G in 1926 (CRESCENT 1940 [10/24]), building H is relatively similar in design. It stands west of building G. It contains a single level and measures 54 by 78 feet and 23 feet in height. Its cream brick walls are laid in a common bond on a poured concrete foundation. Its low pitched, gable roof is covered with asphalt. Two rows of double hung windows with rectangular, cement lintels and sills span the front under a corbelled, elevated cornice. Windows contain 12/12 lights. The glazing in many of the windows has been altered along the two rows of windows along the rear of the building. Its end walls are sandwiched between

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building G and the power plant now owned by Lawrence University. The building has a clear span whose roof is supported by steel trusses. Ceiling construction is concrete, and the floor is concrete on grade.

The Fox River Paper Company completed the long mill complex by adding the power house in 1928. Its west side abuts building H. Its southeast corner joins the pre-1883 building which the company used as a garage by about 1928 (Sanborn-Perris Map Company 1924/1934; POST CRESCENT 1940 [10/24]). Constructed of cream brick laid in a common bond, the 100 by 45 foot power house contains a single level. It rests on a poured concrete foundation, and a flat, tile roof surrounded by a parapet covers the building. Both ceiling and floor are concrete. Steel trusses support the ceiling. An elevated corbelled cornice is elaborated by raised diamonds and cubes placed above and below the cornice line. Organizing the facade and elevations, round-arched windows each with a voissoir and keystone are composed of two vertical sections and extend the full height of the building. Except in areas along the south elevation, the windows are covered. Five windows occur along the south or rear elevation and three along the east elevation. Six windows organize the facade. The two end windows descend to the height of the door on the east side. The interior contains two turbines.

Constructed of cream brick laid in a common bond, building W, the garage, stands on a random rubble foundation. It measures 35 by 50 feet and rises three levels including the basement. Its gable faces forward. A gently sloping gable roof covered with asphalt shingle completes the building. Small brackets occur under the eaves of the front facade. Double hung, arched windows pierce the north and south facades. Three openings occur along each of the three levels along the north elevation. Windows contain 8/8 lights. Doors appear in the center openings on levels 1 and 2. The second level of the front facade contains two windows similar to those along the rear separated by a central door. Three large openings closed by overhead doors are located along the first level.

The power canal which forms a contributing element to the district branches off the Fox River 296 feet west of the Lincoln Mill. The main channel of the Fox River flows south of the mill complex. The canal flows 160 feet northeast to the east side of the Ravine Mill. Here it enters the mill under the south half of the building and exits at the southwest corner. The tail race runs 240 feet between the Rag and Ravine mills and the Lincoln Mill and under the Oneida Street Bridge. Here, it flows back into the main channel. From the west side of Ravine Mill, the canal also flows 160 feet northeast to its northwest corner and then turns west running 208 feet on the north side of the Ravine and Rag mills. It goes under the Oneida Bridge and turns to flow 50 feet south to the Fox River Mill. The canal runs due south under the west end of building C and directly enters the main channel from the south side. The canal varies greatly in width. West of the Ravine Mill, it reaches a maximum

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width of about 128 feet. From this location, the canal narrows considerably to about 25 feet north of the Ravine and Rag mills. For the most part, the walls of the canal are earthen. It does flow against a 272 foot long random rubble retaining wall which runs west of Lincoln Mill along the southeast bank to the northwest corner of the Ravine Mill. The tail race between the two mills is also at least partially stone-lined.

The head race to the power house of the Lincoln Mill also once exited from the power canal west and just to the south of this mill. The head race ran between the south wall of the mill and an existing random rubble, east-west retaining wall. The wall extends from a point opposite the southwest corner of the mill east 164 feet to the current dam which runs 72 feet west of the Oneida Street Bridge. The area of the approximately 48 foot wide race has been filled-in from the power canal to the power house. The race descended under the power house to turn its turbines and exited under three arches supporting the east side of this building. From here, the tail race flowed east under the Oneida Street Bridge and into the main channel. This area is still intact and contains water. The current 48 foot long north-south dam which stands west of the power house replaced the earlier dam located opposite the west end of the Lincoln Mill in 1926 (POST CRESCENT 1940 [10/24]).

PROPERTY INTEGRITY

Building modifications to the original are clearly visible as with any industrial complex occupied through the first half of the nineteenth century and not abandoned until 1948-1955 (POST-CRESCENT 1955 [1/11]). Many of the modifications illustrate changes in industrial building technology and expansion of the business. However, although some visible integrity has been lost, much of the expansion occurred as aggregations to the original. And, except where noted the machinery has been removed.

Ravine Mill

Alterations of the Ravine Mill (building A) upon the exterior include the rebuilding of the south elevator tower, the placement of two lower brick additions on the west side after 1934 (Sanborn-Perris Map Co. 1934), the bricking of windows along rear, and limited window alteration along the north or front facade. The greatest interior modification in the mill complex occurs in the Ravine Mill. Much of the wood framing and wood floor and ceilings were removed and replaced by steel columns and beams on all levels and concrete floors and ceilings on lower levels. Asphalt shingling is added to roof.

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Lincoln Mill

At the Lincoln Mill, low recent loading docks along the north, west, and south sides were removed. A steel cladded addition to the north and concrete loading docks and post 1934 tower on the west still remain as do the brick additions in the courtyard area along the north facade. Added between 1895 and 1911 (sections Q and R) and 1911 and 1934 (section S), they represent historic expansion of the business. Windows have been covered but not bricked and asphalt shingle added to the roof. Interior modification to the framework is primarily the supplementation of wood with steel framing and addition of concrete flooring on some floors.

Rag Mill

Alterations of the Rag Mill include additions of loading areas on north and especially the south side, the covering of windows especially on upper levels, the replacement of the iron walkway with a steel breezeway, and the recent embellishment of the north entrance. Interior modifications are limited to the addition of several partitions especially on the first floor and the supplementing of wood with steel framing in some areas.

Fox River Mill

Modifications at the Fox River Mill generally parallel those of the other mills. The mill has grown by accretion. Post 1934 and some fairly recent additions include building K, loading docks along the north facades of buildings D and G, and the placement of a low, steel cladded building in front of building G. The additional level to building D and extention of I occurred between 1911 and 1934. Additionally, some windows have been closed with brick, particularly in the tower and adjacent to the loading docks, and covered. At least one door was relocated. The tin roof has been covered or replaced with asphalt in several areas. Some substitution of wood framing members and posts with steel has also occurred and concrete flooring was added in some areas. While some evidence of industrial processes remains in level 1, all machinery with the exception of one turbine has been removed. Many of the windows of building V, the power house, are covered. Building W has likely undergone considerable change at least along its front facade since its construction prior to 1883. An addition to the front was removed, the asphalt roofing replaced the original, and the overhead doors were added. However, if the building's significance is dated to its absorption by the Fox River Paper Mill, probably in the late 1920s, then this alteration is coincident with its function as a garage.

Thus, the mill complex offers a view of permanent mill construction common



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after 1880 in its long line of relatively narrow, brick buildings capable of sustaining heavy, vibrating loads. The steel framing of its additions were common to industrial architecture after 1900 (Lusignan 1986: 6-4, 11; Maddex 1985).

Serving additional industrial establishments, the power canal once ran as far east as Drew Street before it joined the main channel. By 1934, it was closed to a wheel house just north of building G and by 1958 it ended at building D, its present location. Additionally, the head race south of the Lincoln Mill was filled-in after 1958 as far west as its power house (Sanborn-Perris Map Company 1924/1934; 1958).

Although the power canal has been filled east of the Lake Bridge, several railroad bridges have been removed, and a recent bridge spans the Fox to the west, the general industrial setting along the flats of the Fox River remains similar. This setting in addition to the clusterings of rambling, brick industrial buildings along the river at the base of the bluff adds considerably to the integrity of association and feeling. This location near the railroad adjacent to the Fox River offered an abundant, stable water supply for a constant power source and water supply for the milling operation and transportation for a supply of raw materials and the market necessary for the successful operation of a paper mill (Lusignan 1986: 6-11).

8. Statement of Significance							· · · · ·		
Certifying official has considered the		nce of t ationally		erty in r		o other		S:	
Applicable National Register Criteria	XA	⊟в	хC	D					
Criteria Considerations (Exceptions)	A	⊟в	□c	D	E	F	G		
Areas of Significance (enter categories from instructions)ARCHTTECTURE				Period of 1883-	1939	(1)		Significant Dates <u>1883–84 (2)</u> <u>1888–89 (3)</u> <u>1892–93 (4)</u>	
Significant Person					<u>N/A</u>	ct/Builde			

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Fox River Paper Mill district gains significance under criteria A and C in the areas of industry and architecture. Through criterion A, the mill complex achieves significance in association with the paper milling topic under the context of industry (Lusignan 1986). It provides an example of paper manufacturing utilizing primarily rag as a raw material during the second 1882 to 1900 phase of the industry when paper milling rapidly became a major industry in the Fox River Valley and spread north and west. It also illustrates the industry's period of mill consolidation but continued expansion as the industry moved toward the production of specialty paper products. Erected in an astylistic, utilitarian building mode common to the often narrow, brick industrial building complexes of the period and carrying some elements of the Italianate style, the buildingsalso acquires significance under criterion C in the area of architecture. The interior integrity of the building, primarily a post and beam construction, is high for such industrial complexes which have continued in use until the recent past. Despite the integrity of the interior, the level of significance remains at the local level. Comparative studies of mill buildings producing rag stock have not progress far enough to allow comparison at the state level. And, the mill's growth is expressive of the city's industrial development since Appleton remained an importance paper milling center during the period of significance.



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HISTORICAL BACKGROUND

Originally founded in association with Lawrence University, Appleton was platted in 1848. It grew rapidly in population in the early 1850s, particularly 1853. In that year, it was incorporated as a village. During this period, early investors, primarily easterners, already recognized the importance of Appleton's location on the Fox River to its industrial development. Dropping 170 feet from Lake Winnebago to Green Bay, the Fox provided sufficient and consistent power for the support of numerous By 1854, eighteen manufacturers constituted its industrial industries. strength. The arrival of the railroad by 1861 and to a limited degree the Fox River itself connected Appleton to sources of raw materials and markets in Chicago and Milwaukee. Channel improvements along this section of the Fox were completed by 1856, but more reliable rail transportation which was expanded considerably in the 1870s superceded it in importance. The first power dam spanned the river in 1848. Preceded by an 1859 coffer dam, the middle dam which powered the Fox River Paper Company's mill complex was completed in 1880. The power canal was built along the west bank from the middle dam to Lawe Street in the early 1880s. It supplied water power to a large number of industries along the narrow flats of the Fox. The flats of the river provided a level area for the linear arrangement of industrial buildings (Goodspeed ca. 1915: 143, 151, 157, 171; Larson and Glaab 1964: 5-6, 52, 82-83; Nash 1901: 10, 12, 17; Outagamie County State Centennial Commission 1949: 145, 155, 162; McLandress 1983: 2, 20, 30).

Appleton like the adjacent communities experienced three phases of economic growth: lumber, flour, and paper milling. Initial industrial development remained comparatively slow because of the shortage of investment capital. Thus, despite the early building of several paper mills in the 1850s and 1860s, the high capital demands required to establish such industries halted rapid development until the 1880s (Larson and Glaab 1964: 19; Outagamie County State Centennial Commission 1949: 156). However, lumber and flour milling demanded comparatively limited capital. Appleton's early industry emerged around the processing of local lumber and lumber products. By 1854. it supported four sawmills in addition to lath mills, a planing mill, sash and blind factories, a chair factory, and an ashery. Lumber milling retained importance into the 1870s. Five sawmills served Appleton by 1874 (Goodspeed 1915: 147; Larson and Glaab 1964: 7; Nash 1901: 10). Although subsidiary industries remained numerous, lumbering declined in importance as resources dwindled in the immediate watershed.

Wheat had become the main crop in southeastern Wisconsin by settlement and remained so into the 1870s when competition from western growers, exhausted soils, and pests and disease removed intensive production to other areas. Flour milling gained importance in Appleton by the early 1860s. With two mills, flour milling had begun by this date but had not reached its peak.

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Three large mills operated by 1860 and four by 1874, but milling declined by the beginning of the 1880s as it also shifted west to Minneapolis (Larson and Glaab 1964: 7, 22, 58; Nash 1901: 12; Goodspeed ca. 1915: 181; Outagamie County State Centennial Commission 1949; Dull 1874; McLandress 1983: 12).

The lower Fox River Valley became an important, early paper milling area with centers at Appleton, Neenah, Menasha, and Kaukauna by the 1870s. As flour milling began its decline, manufacturers purposefully sought other investments such as paper milling. Midwestern capitalists even in the late nineteenth century remained relatively small and tended to seek multiple investments with partners. They pooled their monies and spread their risk. If one investment proved financially unsound, they possessed others through which to succeed. Thus, Fox River community investors finally accummulated sufficient monies to support expensive paper mills through partnerships and often remained associated with several other enterprises. By the 1870s, Appleton leaders had also begun to search for and attract outside investors to develop their industry (Larson and Glaab 1964: 73). Situated along the lower Fox, Appleton provided an opportune site for the industry. Paper making demanded a consistent flow of water providing constant power to produce paper of uniform quality and large amounts of relatively pure water consumed by processing. Flat areas along the banks such as at Appleton also allowed space for the long, linear mill buildings typical of the industry. Forests in northern Wisconsin supplied a sufficient supply of spruce and balsam to satisfy the industry. Without local sources of paper, demand for the product grew with the population and reached significant proportions by 1870. Thus, paper milling dominated Appleton's industry by the 1880s (Larson and Glaab 1964: 65. 71, 75, 79, 82-88; Nash 1901: 17; Reid 1874: 13; Abrahams 1982: 9-10; Studley 1938).

The Milling Industry in Wisconsin

Wisconsin paper milling experienced three phases. Initial introduction and gradual development occurred in central Wisconsin, primarily along the lower Fox River Valley in the Appleton, Neenah, Menasha, and Kaukauna area, between 1855 and 1882. Its rapid expansion within and from the river valley to northwest Wisconsin along the Wisconsin, Chippewa, and Flambeau rivers took place between 1882 and 1900. This expansion was spurred by the introduction of wood pulp as a source of supply, the adoption of rolled rather than sheet paper to the printing press in 1875, and the search by capitalists for alternative manufacturing investments to flour milling. Many converted their flour mills to paper production. Despite aerial expansion, major growth remained concentrated along the Fox River. In the final phase after 1900, the number of companies declined as they consolidated and expanded operations or failed (Abrahams 1982: 9; Bowman 1940: 12; Larson and Glaab 1964: 108).

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Although the industry was first established in Milwaukee in 1848 and moved to Beloit in 1855 and to Whitewater in 1857-1860, development there was minimal. The geographic composition of the Fox River Valley favored the industry's early development after its establishment in 1853 by Richmond Brothers in Appleton who produced coarse rag paper. This initial effort attracted craftsmen skilled in paper making to the lower Fox Valley, and more mills were founded. The Neenah Paper Mill emerged in 1865. Four additional companies were founded in Neenah-Menasha by the end of the period. Kimberly and Clark began their rapid development in the industry in 1872 at the Globe Paper Mill of Neenah. Founded in 1872, the Eagle Mills of Kaukauna became the first in Wisconsin to use wood pulp. At the end of the period, Kimberly and Clark established the Atlas Mill in 1878-1879, the largest company a that time, and the Vulcan Mill in 1881, both in Appleton. Additional mills in Appleton in this period included the A.W. Patten Mill, Ames Pulp Company (Appleton Pulp and Paper) in 1875, and the Western Wood Pulp Mills in 1872. By 1875, the mills in the City of Appleton totalled three and by 1882, nine (Titus 1930: 385-86; Lusignan 1986: 6-3; Nash 1910: 12; Weeks 1916: 280-81; Larson and Glaab 1964: 87, 94-95, 101; Bowman 1940: 11). Between 1848 and 1870, twelve mills emerged in Wisconsin with six still operating in 1870, and between 1870 and 1882 twenty had been organized. Of the thirteen paper companies extant in 1880, nine were located in the Fox River Valley (Bowman 1940: 11).

In the second phase of expansion between 1882 and 1902, eighty-one new paper manufacturing companies expanded into twenty-four new communities (Bowman 1940: 12). Kimberly-Clark expanded in Appleton with the building of the Tioga Mill in 1882 and the Telulah Mill in 1887. Additional Appleton companies during the 1882-1900 period included the Riverside Fibre Company in 1893 and Consolidated Papers, Inc. in 1899 in addition to the Fox River Paper Company founded in 1883 (Lusignan 1986: 6-5; Abrahams 1982: 11). The three paper mills extant in 1877 in Appleton expanded to seven in 1884. This number remained relatively stable, reaching eight in 1887, remained there through 1893, and dropped to seven by 1899 (Pryors & Co. 1877; Wright 1884; 1887; 1891; 1893; 1899).

Fox River Paper Company

Although the paper industry in the Fox River Valley underwent considerable technological development during the 1870s, primarily in the transition from cloth rags to wood pulp as a raw material, many of the processes remained essentially the same from its initial establishment in 1848. However, the success of the paper industry in Wisconsin was partly based on the introduction of wood pulp process in 1872. Since the Fox River Paper Company chose to develop fine writing papers of varying amount of rag content, the processing of rags and their manufacture into paper, rather than the processing of pulp, is more relevant to the development of this company. Any

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wood pulp utilized in its papers was purchased from pulp mills rather than processed in its own plant (Larson and Glaab 1964: 85; Lusignan 1986: 6-9).

The Fox River Flour and Paper Company organized during this period of mill expansion. Five investors, G.W. Spaulding, William Grant Whorton. John Hart Whorton, and S.K. Wambold of Appleton and Jere D. Witter of Wisconsin Rapids formed the company on March 5, 1883. Following the pattern of the era, they each owned multiple investments in other companies which produced flour lumber, barrels, sash and doors, nails, chairs, beer, lime, coal or woolen textiles (McLandress 1983: 25-29). They formed with a capitol of \$200,000 to manufacture flour and rag book paper. Paper mills generally produced a limited number of paper grades. The Fox River Paper Company concentrated upon bond and ledger papers, and tablet, book, and play card stock. Thus, Appleton manufacturers still bridged the transition from flour to paper milling. While the paper mill achieved success selling products to printers, stationiers, and ledger book and school supply companies, the flour mill suffered from the declining wheat production of the 1880s. The three flour mills owned by the company already existed at the site, and the paper mill was constructed abutting the west flour mill (Art Publishing Company 1887: photograph: Stoner and Vogt 1874; Goodspeed ca. 1915: 189-90; McLandress 1983: 25, 32-34, 39; Appleton Advancement Association 1892: 10; Reid 1874; POST-CRESCENT 1884 [1/24]).

The Ravine Mill

The Ravine Mill was constructed under the direction of a paper mill architect. E.D. Jones of Pittsfield, Massachusetts (POST-CRESCENT 1883 [7/1]: 1888 [3/22]) between April, 1883 and February, 1884 (POST-CRESCENT 1883 [4/12]; 1884 [2/14]) on the site of the S.R. Willy Flour Mill just east of two other flour mills, the Outagamie and Lawrence mills and north of the Briggs and Wambold Sash, Door, and Blind factory. The company also purchased the Riverside Flour Mill east of Lake Street (POST-CRESCENT 1883 [11/1]). The POST-CRESCENT described the mill in 1883 as a brick building of solid masonry walls standing three stories on a stone foundation and brick arches which were placed on bedrock. Massive timbers composed the interior framing, and a fireproof roof covered the mill. A one story, brick boiler house and smoke stack which are no longer extant were placed on the southwest side. The mill was illuminated with electric lighting (POST CRESCENT 1883 [10/18]).

The Fox River mill collected rags locally and in Chicago and Milwaukee. Rags were first sorted and cut into small pieces. During the pulping process, they were beaten to remove dirt, boiled in a bleach solution, and placed in "Hollanders" which contained a beating roll to extract the fine rag fibers. In the Fox River Mills this production area is denoted as "drainers" (Sanborn-Perris Map Co. 1883; 1911). This pulp was then thoroughly mixed with water

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along with coloring and sizing in beaters to form a thin, gelatinous coating on the fibers' surface. From here, the mass travelled to a second beater or "Jordan" where it was refined once again and flowed to the paper machine, generally the Fourdrinier. In 1803, Henry and Sealy Fourdrinier commercialized this invention. At this point in the process, the pulp was 90-99% water. The major component of the Fourdrinier was a long, narrow continuously moving, vibrating wire screen belt onto which the pulp flowed. Draining and suction drew water from the mass leaving a thin layer of pulp. At the end of the belt, rollers and steam-heated cylinders removed additional water. The paper was finished as it emerged from the polishing rollers of the "calender". It was then cut by machine, dried individually on wood racks in a drying loft or on iron cylinders 10 feet in diameter and packed for shipment. A hot operation, paper making required considerable ventilation. The capacity of the mill was limited by the number of paper machines, which was rarely more than two, and the width of the machine, varying between 36 to 72 inches in the Fox River Valley (Lusignan 1986: 6-9-10; Weeks 1916: 170-81; Wilkinson 1975: 36-47; Larson and Glaab 1964: 22-25, 80-81; McLandress 1983: 14-15).

Level 1 originally contained six turbines as well as the drainers which refined the rag pulp. The second level held the beaters or Jordan engine, 72 inch wide fourdrinier, and drying calenders. Rag cutting and cleaning occurred on the third level. A second room was devoted to rag and paper storage. Rag sorting and bleaching, the beginning of the process, took place on the fourth level. The raw materials for the paper included cotton and some linen clippings, rags, and jute and hemp rope. Functions shifted location slightly through time, but the same basic functions continued in the mill into the twentieth century (POST-CRESCENT 1883 [7/1]; Sanborn-Perris 1886; 1911; Appleton Advancement Association 1892: 10). No evidence of these functions remains in the Ravine Mill which has experienced the greatest degree of interior modification. This mill initially employed about 75 to 80 individuals and output about four tons of paper daily (POST-CRESCENT 1925 [1/17]; anonymous n.d.; McLandress 1983: 31-33; Goodspeed ca. 1915: 611).

The Lincoln Mill

The Fox River Flour and Paper Company discontinued flour manufacturing in 1887 to concentrate on paper milling as the alteration in its name to the Fox River Paper Company indicates (McLandress 1983: 32; Anonymous n.d.; abstract of title owned by Robert Miller, Neenah). It began its second phase of expansion with the construction of the Lincoln Mill between August, 1888 and October, 1889 on the site of the Briggs, Whorton, and Beveridge's planning mill which burned in July, 1886 (POST-CRESCENT 1886 [7/8]; 1888 [6/28]; 1889 [10/24]); Sanborn-Perris Map Co. 1886). E.D. Jones also designed the Lincoln Mill as well as the Gilbert Paper Mill at Menasha. Most of the foundation and the rebuilding of the south wall of the head race on the south side of the mill

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occurred in the fall of 1888, and the remainder was completed in 1889 (POST-CRESCENT 1888 [3/22, 8/9]).

The paper making process began in the east wing (section N) of the mill which contained twelve drainers on the first and second levels, washing and beating machines on the second, and a drying loft rather than cylinders on the third. Evidence of the drainers remains. A steam boiler on level 1 and bleach boiler and sizing roomon level 2 are in section 0. The power house (section T) contained seven turbines on the first and second level, and rag cutting machines occupied the third level and storage occurred on the top level. The long center wing (section M) contained the 74 inch Fourdrinier paper machine on the third level. Packing occurred on the fourth level. The west wing (section L) became the finishing section. The drying calenders probably occupied the third level while shipping occurred on the first level. Cutting was placed on the second level, and ruling occurred on the third. Lining of the ledger books was initially done by hand (McLandress 1983: 42). Chemicals were stored in section P on the north side. Addition Q contained steam boilers and section R became the engine room. The tower (U) is positioned between sections N and P. The freight elevator and on the top floor the water tank for the sprinkler system occupied this section. According to the POST-CRESCENT, the building featured a seven story "ornamental tower" which contained the main entrance (POST-CRESCENT 1889 [2/7]; also [3/28]; 1888 [6/28, 8/16]; Sanborn-Perris Map Co. 1886; 1891; 1911). The Lincoln Mill increased the Fox River Paper Company's production capacity by eight tons daily to twelve tons (Appleton Advancement Association 1892: 10; McLandress 1983: 40; Goodspeed ca. 1915: 611).

In 1893, the Fox River Paper Company increased its capital stock to \$400,000 which allowed a considerable plant expansion by the addition of the Rag Mill (building B) to the west of Lake Bridge and the Fox River Mill (sections C-K, V-W) to the east of the bridge. This expansion extended the mill's capacity to 30 tons daily which required the employment of about 375 employees (McLandress 1983: 33; Titus 1930: 390). The Fox River Mill replaced the Riverside Flour Mills (Sanborn-Perris Map Co. 1891). E.D. Jones again designed these buildings which were constructed between approximately September, 1892 and March, 1893 (POST- CRESCENT 1892 [9/10]; 1893 [1/14]).

Rag Mill

The Rag Mill (building B), called the "rag room," readied rags for the paper machine in the Fox River Mill and did not contain a paper machine. A turbine housing remains along the north wall of the first level. A concrete tank in the southwest corner, called the rag cooler, extended to the second level and was later used as the mail room. Rag sorting occurred on the fifth level, rag cutting using what the POST-CRESCENT called "dusters, cutters, and thrashers"

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occupied the fourth, and rag and paper storage was in the basement, first, and second level (Sanborn-Perris 1911; POST-CRESCENT 1892 [9/10]).

Fox River Mill

Rag preparation continued in buildings D, E and F in the Fox River Mill. Initial maceration of the rags occurred in the drainers, now evidenced by brick tanks, on levels 1 and 2 of building D. Bleaching probably occurred in the remnants of the tanks now in level 1 building F. The eight beaters which further refined the rag pulp were located on the second level. The remains of the tanks on level 1 of building E were associated with the bleaching process. A turbine was also housed on this level. Rag cooking occurred on level 3. The 86 inch Fourdrinier occupied the third level of building D. The fourth level was constructed after 1911. Paper drying in cylinders probably occurred on this level (Goodspeed ca. 1915: 610; McLandress 1983: 44). Building C functioned as the finishing room. Cutting occured on level 3, storage and shipping on level 2, and storage on levels 1 and 3. The housing for a turbine also remains on level 1. Bulding J functioned as the boiler house and building I as the engine room (Sanborn-Perris Map Co. 1895; 1911; POST-CRESCENT 1892 [9/10]).

Beginning at the turn of the century, the third period of development in the paper industry witnessed company consolidation and considerable growth of individual facilities. By 1916, there were fifty paper mills in Wisconsin and the state ranked fourth in paper production. Wisconsin paper mills concentrated their production upon specific types of paper. In 1905, fiftytwo companies operated 130 mills. By 1939, thirty-eight companies remained. Fifty percent of the mills produced newspaper stock. However, when the tariff upon Canadian paper products was removed in 1911, manufacturers quickly shifted to specialized paper products including light-weight papers, tissue paper, napkins, blueprint and mineograph paper stock, and high quality writing and printing papers (Lusignan 1986: 6-6-8; Bowman 1940: 14; Weeks 1916: 338-39; Adams 1982: 10). By 1899, seven paper companies operated in Appleton. This number varied between seven and ten to 1938 (Wright 1899: 1925: 1930: 1934; 1938).

The Fox River Paper Company was already engaged in specialty paper manufacturing. Therefore, in 1915, the company planned another expansion phase. A by-product of the war, the demand for paper products rose considerably in 1916 (Weeks 1916: 319). The company concentrated further on a few grades of high quality paper, the rag bond, ledger, and blueprint papers. It also began to replace original machinery but often did not change the functions of the buildings. In June, 1920, it expanded by acquiring an extant two machine mill, the 1886 Telulah Mill from Kimberly, Clark & Company (not nominated). The mill stood across the Fox River just south of the Fox River

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Paper Mill. The Fox River Paper Company remodeled the mill to allow the production of fine writing paper rather than newspaper stock. This step increased total production to 50 tons per day and ranked the company as the largest producer of certain kinds of bond and ledger paper in the nation (POST-CRESCENT 1925 [1/17]; Tutus 1930: 391; Anonymous n.d.; McLandress 1983: 47).

Between 1924 and 1926, the Fox River Paper Company also added to the Fox River Mill. Added between 1924 and 1926, building G contained the water filtration plant on the first level and a machine shop on the first and second levels. Building H, also a machine shop, was added in 1926. In 1928, the company attached the power plant (building V) to the east end of building H. This power plant joins a pre-existing building (building W) at its southeast corner. Probably at this time, the Fox River Paper Company absorbed the pre-1883 building (building W) once associated with the Victoria Merchant Custom Mill and utilized it as a garage. Building K, whose function remains unidentified, was added between 1932 and 1934 (POST-CRESCENT 1940 [10/24; 1932 [4/30]; Sanborn-Perris Map Co. 1883; 1886; 1924/1934; 1958). The current dam adjacent to the Lincoln Mill replaced the former one in 1926. In 1928. the Fox River Paper Company erected a power plant on the east side of building G which is now owned by Lawrence University. In 1937, the Fox River Paper Company purchased the Patten Company, located south of the Fox River north of the Telulah Mill, for storage purposes. Owned by W.C. Wing of Neenah since 1915, the Fox River Paper Company was transferred to a corporation formed by E.A. Oberweiser, M.E. Roberts, and R.F. Bellack on December 1, 1938. By this date, the company employed over 400 emplyees (POST-CRESENT 1938 [9/38]: 1940 [10/24]). As the Fox River Paper Company consolidated its operations to the Telulah Mill, it closed production in the Lincoln Mill in 1948, the Fox River Mill in 1952, and the Ravine and Rag mills in 1955 (POST-CRESCENT 1955 [1/11]).

SIGNIFICANCE: INDUSTRY

The Fox River Paper Company occupied its mill buildings from 1884-1893 to 1948-55, a period of more than fifty years. The mill buildings represent the second and third period of development in the paper milling industry. The company began operations at the beginning of the general expansion of the paper mill industry in the early 1880s. Much of that expansion may be attributed to the growing amounts of capital available to build such expensive facilities and the introduction and sophistication of the wood pulp extraction process. Typically, the Fox River Paper Company began through the pooling of resources by five investors. Despite the growing use of wood pulp as the raw material for paper, the Fox River Paper Company became one of the few companies to produce rag stock.

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The company continued to enlarge plant facilities and production through the nineteenth and first half of the twentieth century as demand continually rose. Beginning as a one paper machine plant in the Ravine Mill in 1884, it rapidly expanded its production to two machines with the erection of the Lincoln Mill to the south in 1888-1889 and its output from four to twelve tons of paper per day. The 1892-1893 expansion with the Rag and Fox River mills added a third machine and extended production to 30 tons of paper daily. By 1911, Wisconsin companies rapidly shifted to the production of specialty papers as competition with Canadian companies threatened their market. The Fox River Paper Company employed this opportunity to extend its production in this line. It reached 50 tons of paper per day with the remodling of the adjacent Telulah Mill in 1920. Thus, the Fox River Paper Mill well illustrates the the rapid expansion of the industry during the second phase of development and the specialty production which emerged in the third phase in the Fox River Valley. Engaged in one of the largest industrial operations in Appleton, it also grew to become one of its largest manufacturer of rag products in the nation (McLandress 1983).

SIGNIFICANCE: ARCHITECTURE

The three building complexes of the Fox River Paper Mill illustrate the common industrial architecture of nineteenth century eastern Wisconsin rag paper mills, the interior spaces necessary to operate such a plant, and the manner of facility expansion during the late nineteenth century. While little evidence of the machinery remains in the buildings, the functions dictated the proportions and loads which the buildings were designed to sustain.

Typical rag paper mill architecture of late nineteenth century central Wisconsin generally includes long, narrow buildings of three to four levels in height. Load-bearing brick walls were placed on massive stone foundations with brick supporting arches at foundation level. Timber and post construction and steel truss work became a common means of interior support. Wood floors and ceilings were the norm. Long rows of windows on each story provided the ventilation necessary for hot and damp operations. Emphasis on stylistic features remained minimal. Common areas of elaboration included window lintels, for example segmented and rounded lintels, corbelled cornices, corbelled cornices returns, and perhaps bracketing for this late nineteenth century era (Salkin and Orr 1988: 35-36).

The building elements of the Fox River Paper Company mill complex illustrate this mill building type. Constructed by the Massachusetts paper mill architect E.D. Jones (POST-CRESCENT 1883 [7/1]; 1888 [3/22], 1892 [9/10]), the mill possesses brick masonry walls which stand on heavy random rubble limestone foundations. One of the larger mill complexes in Appleton, its height occasionally exceeds three to four levels. Many of the building are

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proportionately narrow and possess rows of windows with 10/10 to 12/15 lights giving necessary ventilation and added light to the electrical illumination. Exterior stylistic attributes reflect the Italianate style with the rounded and segmented lintels, the corbelled cornice and corbelled cornice returns, brackets, and towers. The two towers of the Fox River Paper Mill go beyond the normal elaborations found in paper mills. In many areas except the Ravine Mill, the brick arch support on levels 1 and 2, the wood post and beam construction, and steel tie rods and frame truss work remain. Many of the floors and ceilings are wood, but some in the Fox River Mill were originally concrete.

While machinery has been removed, interior floor plans and in a few instances the support system for the machinery illustrate the kinds of spaces necessary for the operation of a late nineteenth century rag paper mill. Each building phase served one paper machine, the nucleus of the operation. Thus, although operations not tied to large machinery might shift floors, the general flow of production remained similar. Operations in the Rag Mill worked from top to bottom in a vertical manner, those in the Lincoln Mill from east wing to west wing in a generally vertical manner, and with one exception those in the Fox River Mill proceeded from buildings E and F west to building C. The preparation of rags in the Rag Mill represents the interruption in the flow of production. In this instance, the company was likely attempting to best utilize its cramped lot space adjacent to the river. The remains of the housing for drainers, beaters, and turbines, the long floor spaces especially for the paper machines, and the elevator towers all assist the interpretation of spaces. And, areas of particularly heavy machinery correlate with the remaining brick arch supports, drainer walls, and roof trusses noted in buildings A, D, E, F, and M, N, and L. Thus, many of the structural elements do reflect function.

Paper mills commonly grew through accretion (Salkin and Orr 1988: 36). The addition of the major component, the paper machine, necessitated the addition of all the other functions. Therefore, the Fox River Mill expanded in 1888-1889 and 1892-1893 by adding whole building complexes. Exceptions include the addition of the machinery shops and the power plant in the 1920s. When the Fox River Paper Company consumed its space along the power canal, it purchased another mill at a separate location in 1920 and revamped it to suit their operation. Thus, the mill illustrates the growth of mill complexes and through this manner of expansion preserves many of its original spaces.

The Fox River Paper Mill gains architectural significance as an example of anindustrial building type with its minimum of stylistic elements, of the interior spacing and construction needed to support rag paper production, and of the manner in which such operations expanded.

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A COMPARATIVE ANALYSIS

Because with one exception studies fail to examine the integrity of extant mills along the Fox River Valley, the spatial context within which the Fox River Paper Mill developed. the significance of the mill remains at the local level. It does possess integrity equal to or greater than two identified rag mills, the Whiting-Plover Mill located outside the Fox River Valley on the Wisconsin River near Stevens Point and the George A. Whiting Mill of Menasha. And, its external integrity appears at least equal other paper mills surviving in Appleton. Its comparison with other rag paper mills such as the one noted above is appropriate since wood pulp mills required additional spaces to process fiber from wood pulp such as the grinding and wood rooms. They generally engaged in volume production of newsprint and wrapping paper which necessitated considerably greater size than the rag paper mill. And, because the production of paper from wood pulp requires heavier machinery especially as time progressed, pulp mills tended to receive extensive structural modification on the interior through the replacement of wood with steel and concrete. These distinguishing features warrants concentration on this single mill type.

The Whiting Plover Mill was constructed in 1891-1892 by the Plover Paper Company to produce fine paper products of rag. The buildings reflect numerous construction periods, 1898, 1903, 1912, 1922, and others. It began as a utilitarian, commercial brick mill building on a stone foundation and was encased by later brick and concrete additions. Limited detailing includes corbelled brick cornices and segmented lintels. However, many of the earlier exterior walls were either substantially altered, demolished or enclosed by later additions and windows were covered. Interior construction elements included wood post and beam construction, wood floors and ceilings, and iron replaced many of the wood framing and steel column caps. Steel members members. Concrete has replaced wood flooring. However. the brick arches providing first floor support still remain.

The George A. Whiting Mill of Menasha was constructed in 1888 to produce fine paper products from rag stock. The Whiting Mill is a two to three story brick building. Decorative elaborations include corbelled cornices, returned corbelled cornices, and segmented window lintels. The exterior of the building exhibits considerable integrity with little modern construction obscuring its walls and relatively limited window alteration. Much of the internal construction also remains: the limestone foundation with brick supporting arches, the wood post and beam construction, wood truss supports of the third floor, and original wood floor and ceilings. In some areas of the lower floors, some posts were reinforced with steel, steel I beams have supplemented wood beams, and concrete has replaced wood planking in floors and ceilings (Salkin and Orr 1988: 23, 26, 37-39).

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The integrity of the Fox River Paper Mill is greater than the Whiting-Plover Mill and approximately equivalent to the smaller Whiting Mill. A greater number of its external brick walls than those of the Whiting Mill have been covered as the mill expanded in the late nineteenth century. However. such accretion also reflects the growth of the mill as it expanded production. Recent entrances and loading docks have been created particularly along the north wall of buildings C, D and E, the rear wall of building B, and along the west and south side of the Lincoln Mill. Much later steel cladded buildings occur along the north wall of the Lincoln mill and the north wall of building G. Paritcularly its upper windows have been bricked and those in the Lincoln Mill have been removed and covered although some remain. Decorative detailing such as the corbelled cornices, corbelled cornice returns and segmented and rounded window lintels remain relatively intact. The closing of openings along the towers does detract from these functional and decorative elements of the mill complex. Upon the interior, the brick arch supports as well as the housing for machinery remains in levels 1 and 2. Much of the interior post and beam construction survives except in the Ravine mill where it has been replaced with steel memebers. Steel posts and beams do occasionally supplement the wood framing in areas scattered through the three complexes and completely replace wood members in modified areas such as building I or the upper level of building D. The timber trusses and steel tie rods on upper levels also remain. The steel interior framing of buildings G and H are original and reflect production expansion during that period. Then, although the Fox River Paper Mill has suffered modification, some of it reflects industrial expansion as buildings were added. It continues to display a clear sense of the original interior and exterior building spacial organization and decorative detailing as does the Whiting Mill (Salkin and Orr 1988).

According to the 1977 building survey conducted by the Historic Preservation Division of the State Historical Society of Wisconsin, the surviving nineteenth century wood pulp paper mills in Appleton include the 1888 Atlas Mill (425 W. Water Street, 7/2A) owned by Kimberly, Clark & Co.; the 1887 Telulah Mill (South Island Street, 11/14), now owned by the Fox River Paper Company; and the 1881 Patten Paper Company (401 East South Island Street, 10/1A) also owned by the Fox River Paper Company. Consolidated Paper's (1130 East John Street, 7/13A) buildings date to 1860 and do not reflect the same building era. The building complex was much expanded after 1900 (Abrahams 1982: 11). The Riverside Fibre and Paper Company (110 North Densington Drive, 10/3A-8A) dates to 1903 and displays a later style of architecture and likely contains different interior construction methods than the Fox River Paper Mill (Appleton Department of Planning and Development 1978).

The long, three story, brick mill building complex of the Telulah Mill gains its external composition through the rows of windows on each floor. The window lintels are segmented. Although some elevations appear to be original, additions cover much of the rear facade and portions of other sides. Many of

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the windows have been bricked. The Atlas Mill complex is composed of at least three building episodes: a one and a half story brick building with segmental windows lintels and corbelled cornice returns, an abutting three story brick building with segmented window lintels, and a complex of one to two story early twentieth century buildings with Neoclassical decorative elements. While the later building complex is not directly comparable because of its twentieth century construction date, the two earlier buildings appear to possess considerable exterior integrity. However, there is much recent construction immediately adjacent to them which visually interferes with the assessment of these buildings and adversely affects their integrity of setting. The Patten Paper Company is a long one story, brick building displaying segmented window lintels. Recent modifications have considerably altered its facade.

Seven to nine paper mills operated in Appleton during the 1882 to 1900 era (Wright 1884; 1887; 1891; 1893; 1899). Of these number, about half, four mill complexes including the Fox River Paper Mill, are known to have survived. Because of later modifications, two, the Patten Paper Company and the Telulah Mill, possess less exterior integrity than the Fox River Paper Mill. And, given the extensive internal modifications made by the Fox River Paper Company in the 1920s at the Telulah Mill, it is likely than interior integrity is relatively low. While the Atlas Mill appears to possess some integrity, adjacent recent additions detract from integrity of feeling and association. The integrity of its interior design elements is unknown. This brief comparative study of Appleton wood pulp paper mills dating between 1882 and 1900 indicates the importance of the paper industry in Appleton during this era and suggests that the Fox River Paper Mill possesses equal if not greater integrity to other surviving local paper mills of this era.

In conclusion, the Fox River Paper Mill gains significance under criteria A and C in the areas of industry and architecture between 1883 and 1939 at the local level. Under the area of industry, it possesses significance as an example of a rag paper mill beginning operation during the industry's period of rapid expansion from 1882 to 1900. It continued to extend operations during the general paper mill consolidation period in the twentieth century as it served a specialized paper market for fine writing and blueprint paper. The industry continued to maintain its importance in Appleton as well as in the Fox River Valley during these two periods. Indicating the importance of the Fox River Paper Mill's growth through this era, its period of significance extends from 1883-1884, the date of the construction of the first mill, up to the beginning of the modern era, 1939.

The paper mill gains significance in the area of architecture as an example of an astylistic utilitarian building with limited Italianate styistic elements. Its materials and spatial composition, the long narrow industial building constructed of brick with a stone foundation and illuminated by long rows of

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windows on each floor, illustrate the common type of industrial building erected for the rag paper industry. Its internal characteristics, the brick arches, wood post and beam construction, and wood trusses and steel tie rods. are typical of such mill architecture of the late nineteenth century in eastern Wisconsin. Its limited stylistic attributes, the segmented window lintels, corbelled cornice and corbelled cornice returns, the brackets, and the towers are identified with the Italianate style and are perhaps somewhat more elaborate than the common mill building for this period. Also, the addition by blocks of two mill complexes in 1888-1889 and 1892-1893 illustrate the common mode of plant expansion. The addition of a paper machine necessitated the building of all other associated spaces. This growth by accretion has for the most part preserved many interior spaces which often reflect their function in the paper making process.

Additionally, the canal, the filled-in head race south of the Lincoln Mill, area adjacent to the Lincoln Mill power house, and the flume areas leading south from the canal to the Rag and Fox River Mills which have also received fill may possess significance in the area of historical archaeology. These areas may contain data related to the production of power of the mill complexes. However, these areas have not been archaeologically tested for such data resources. Thus, the potential may only be noted.

The Fox River paper mill then retains considerable integrity as a rag paper mill of the late nineteenth and early twentieth century. It maintains its integrity of location within the Appleton industrial area along the Fox River flats and power canal. And, similarly, its integrity of setting, its proximity to other industrial buildings along the Fox River, is retained. As many industrial buildings, the Fox River Paper Mill suffered alteration to its integrity of design as it expanded. Elevations were covered as the plant grew, but this process illustrates the growth of the mill. Some recent additions, primarily loading areas, cover lower levels. Also, some windows are blocked or covered and some doors are relocated. Two buildings were also expanded upward with production growth. Much of the limited decorative detailing remains. The covering of windows particularly in the towers constitutes the most important alteration. Given production expansion, many of the interior spaces are relatively original. Some walls were added. Although the machinery was removed, part of the support system remains. Some of the interior elements are modified by supplementing steel for wooden elements or for the Ravine Mill the relatively complete substitution of steel for wooden elements. Yet, its overall interior integrity compares favorably with the two other identified rag mills, the Whiting-Plover and George Whiting mills. With several exceptions, the mill and its later additions maintain the brick walls and limestone foundation. The wooden posts and beams and floors and ceilings remain in many parts of the mill. There are also some instances of the early use of steel and concrete. The substitution or supplementation of steel elements particularly in the Ravine Mill does detract from this

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integrity. Also, in many areas, the tin roof has been covered or replaced with asphalt. Through its integrity of workmanship, the mill illustrates the nineteenth century mode of mill construction and its changes in the early twentieth century in its additions such as in buildings G and H. The long, narrow spaces, the rows of windows, the integrity of interior spaces, and the remains of interior elements once surrounding the machinery all provide integrity of feeling. And, the survival of its industrial setting along the Fox River maintains the property's association with its location. With this overall retention of integrity, the Fox River Paper Mill gains significance in the areas of industry and architecture at the local level.

(1) The period of significance for the paper mill extends from 1883-1884, the date of the construction of the initial section of the mill, the Ravine Mill, to the modern era, 1939. The end date reflects the continuing growth and change of the industrial plant as the company accommodated new needs by adding buildings rather than substantially altering the interior of extant buildings. The period of significance for building W extends from its utilization by the Fox River Paper Company from ca. 1928 to 1939.

- (2) POST-CRESCENT 1883 [4/12]; 1884 [2/4]
- (3) POST-CRESCENT 1888 [6/28]; 1889 [10/24]
- (4) POST-CRESCENT 1892 [9/10]; 1893 [1/14]
- (5) POST-CRESCENT 1883 [7/1]; 1888 [3/22]; 1892 [9/10]

9. Major Bibliographical References

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Province documentation on file (NPC):	X See continuation sheet
Previous documentation on file (NPS): preliminary determination of individual listing (36 CFR 6)	7) Brimony location of additional data
has been requested	 Primary location of additional data: State historic preservation office
previously listed in the National Register	Other State agency
previously determined eligible by the National Register	Federal agency
designated a National Historic Landmark	Local government
recorded by Historic American Buildings	
Survey #	Other
recorded by Historic American Engineering	Specify repository:
Record #	
10. Geographical Data	
Acreage of property 5 acres	
UTM References	
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	See continuation sheet
Verbal Boundary Description	
	x See continuation sheet
Boundary Justification	
• ·	See continuation sheet
11. Form Prepared By	
name/title Joyce McKay, Cultural Resources	
organization private consultant	date <u>5/17/89</u>
street & number P.O. Box 258	telephone <u>608-424-6315</u>
city or townBelleville	state Wisconsin zip code _53508

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Fox River Paper Company Historic District Appleton, Outagamie Co., WI

9. Bibliography

- Abrahams, Paul
 - 1982 An Intensive Survey of Outagamie County Historical Industrial Sites. Report submitted to the Historic Preservation Division, State Historical Society of Wisconsin, Madison.
- Adams, Peter
 - 1982 Historical and Architectural Survey of Menasha: Intensive Survey Report. Report submitted to the Historic Preservation Division, State Historical Society of Wisconsin, Madison.
- Appleton Advancement Association
 - 1892 APPLETON, WISCONSIN ILLUSTRATED. Appleton Advancement Association, Appleton.

Aonymous

- n.d. Nearly Half A Century: Fox River Papers. Ms., Fox River Paper Company, Appleton.
- 1884 THE APPLETON AND NEENAH DIRECTORY. Publisher unknown.

Appleton Department of Planning and Development

1978 Historic Building Survey, Appleton. Prepared by the Appleton Department of Planning and Development, Appleton.

Art Publishing Company

1887 THE VALLEY OF THE LOWER FOX: HISTORICAL DESCRIPTION. Art Publishing Company, no place given.

Bowman, Francis

1940 NINETY-TWO YEARS' INDUSTRIAL PROGRESS. Democrat Print Co., Madison.

Godfrey, Beth

1986 Architectural Styles, Architecture (section 2-1, vol. 2). In CULTURAL

RESOURCE MANAGEMENT IN WISCONSIN, edited by Barbara Wyatt, Historic Preservation Division, State Historical Society of Wisconsin, Madison.

Dull, J.

1874 APPLETON CITY DIRECTORY CONTAINING HISTORICAL INFORMATION OF ITS EARLY SETTLEMENT AND GROWTH, ETC. Republished: Outagamie Historical Society, Appleton (1976).

National Register of Historic Places Continuation Sheet

Fox River Paper Company Historic District Appleton, Outagamie Co., WI

Section number ____9 Page ___2

Garfield, Leonard and Barbara Wyatt

1986 Vernacular Forms, Architecture (section 2-1, vol. 2). In CULTURAL RESOUCE MANAGEMENT IN WISCONSIN, edited by Barbara Wyatt. Historic Preservation Division, State Historical Society of Wisconsin, Madison.

Goodspeed Historical Association

ca. HISTORY OF OUTAGAMIE COUNTY, WISCONSIN. Goodspeed Historical 1915 Association, Chicago.

Godfrey, Beth

1986 Architectural Styles (section 2) in Architecture (vol. 2) in CULTURAL RESOURCE MANAGEMENT IN WISCONSIN, edited by Barbara Wyatt. Historic Preservation Division, State Historical Society of Wisconsin, Madison.

Gottfried, Herbert and Jan Jennings

1985 AMERICAN VERNACULAR DESIGN: 1870-1940. Van Nostrand Reinhold Company, New York.

Larsen, Lawrence and Charles Glaab

1964 FACTORIES IN THE VALLEY: NEENAH-MENAHSA, 1870-1915. State Historical Society of Wisconsin, Madison.

Lusignan, Paul

1986 Pulp and Paper Production, Industry (section 6, vol. 2). In CULTURAL RESOURCE MANAGEMENT IN WISCONSIN, edited by Barbara Wyatt. Historic Preservation Division, State Historical Society of Wisconsin, Madison.

Maddex, Dianne 1985 BUILT IN THE USA: AMERICAN BUILDINGS FROM AIRPORTS TO ZOOS. National Trust for Historic Preservation, Washington, D.C.

McLandress, Smith

1983 A History of the Fox River Paper Company. Ms., Fox River Paper Corporation, Appleton.

Nash, James Bertram

1901 The Development of the Manufacturees of Appleton. BA Thesis, Unversity of Wisconsin, Madison.

Outagamie County State Centennial Commission

1949 LAND OF THE FOX, SAGA OF OUTAGAMIE COUNTY, Outagamie County State Centennial Commission, Appleton.

National Register of Historic Places Continuation Sheet

Fox River Paper Company Historic District Appleton, Outagamie Co., WI

Section number ____ Page ____

Panek. R.T. 1976 AMERICAN ARCHITECTURAL STYLES. Architectural Styles, Dover, Massachusetts. POST-CRESCENT 1883- Articles from the POST-CRESCENT, Appleton, 1955 Prvor's & Co. 1877 PRYOR'S APPLETON CITY DIRECTORY. Pryor & Co., Appleton. Reid. A.J. 1874 THE RESOURCES AND MANUFACTURING CAPACITY OF THE LOWER FOX RIVER VALLEY, APPLETON, WISCONSIN. Reid & Miller, Appleton. Salkin, Philip and Gordon Orr 1988 Reports of Investigations: A Study of the Old Whiting-Plover Paper Mill in Plover Township, Portage County, Wisconsin, FERC Project No. 1967, Archaeological Consulting and Services, Madison. Sanborn-Perris Map Co., LTD. 1883- DIAGRAMMATIC AND DETAILED CITY MAPS PUBLISHED FOR USE BY FIRE 1952 INSURANCE AND MORTGAGE COMPANIES, Sanborn-Perris Map Co., Chicago (1883, 1886, 1891, 1895, 1901, 1911, 1924/1934 (revised), 1952). Stoner & Vogt 1874 BIRD'S EYE VIEW OF APPLETON, WISCONSIN. Stoner & Vogt, no place given. Studley, James M. 1938 U.S. PULP AND PAPER INDUSTRY. BUREAU OF FOREIGN AND DOMESTIC COMMERCE TRADE PROMOTION SERIES (no. 182, vol. 27). U.S. Government Printing Office, Washington, D.C. Titus, William 1930 HISTORY OF THE FOX RIVER VALLEY, LAKE WINNEBAGO, AND THE BAY REGION (vol. 1). S.J. Clarke Publishing Company, Chicago. U.S. Department of the Interior, Office of Archaeology and Historic Preservation 1981 Inventories of Telulah Mill and Fox River Paper Mill. Report by the Office of Archaeology and Historic Preservation, U.S. Department of the Interior, Washington, D.C.

National Register of Historic Places Continuation Sheet

Fox River Paper Company Historic District Appleton, Outagamie Co., WI

Section number ___9 Page ___4

Weeks, Lyman Horace 1916 A HISTORY OF PAPER MANUFACTURING IN THE U.S. B. Franklin, New York.

Whiffen, Marcus 1969 AMERICAN ARCHITECTURE SINCE 1780. MIT Press, Cambridge.

Wilkinson, Norman 1975 PAPERMAKING IN AMERICA. Hagley Museum, Greenville, Delaware.

Wright, A.G.

1887- WRIGHT'S DIRECTORY: APPLETON. A.G. Wright, Milwaukee (1887, 1891, 1938 1893, 1925, 1930, 1934, 1938).

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10. Geographical Data

Verbal Boundary Description:

The Fox River Paper Mill District includes the approximate limits of the original property lines. It is bounded north by the south edge of Water Street, west by the east edge of the new Oneida Street Bridge which crosses the river west of the mill complex, south by the Fox River, and east along a boundary aligned with the east wall of building W. The property is legally described as Water Power Block, lots 1 through 18 and 25 and Block C east of the Oneida Street Bridge, and Block 14 of the Appleton plat.

Boundary Justification:

The property encompassed by the described lots are close to those originally associated with the mill building complex as late as the 1930s. It includes the Rag, Ravine, Lincoln, and Fox River mill complexes east through buildings U and W. The associated property in the district is extended north and west to Water Street and the new Oneida Street Bridge to encompass the water power canal which may potentially contain significant historical archaeological resources (abstract of title owned by Robert Miller, Neenah; Sanborn-Perris Map Co. 1883; 1886; 1891; 1895; 1901; 1911; 1934).

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Photographs:

Property: Fox River Paper Mill Location: Appleton, Outagamie County, Wisconsin Photographer: Joyce McKay Date: May, 2-4, 1989 Depository: State Historical Society of Wisconsin

- 1. The north facade of the Lincoln Mill (buildings U and P) at the east end facing southwest.
- 2. The east elevation and south facade of the power house of the Lincoln Mill (buildings T and N) facing northwest.
- 3. South facade of the Lincoln Mill (buildings L, M, T, and N) facing northwest.
- 4. Additions to the northwest side of Lincoln Mill (buildings U, O, and P) facing southwest.
- 5. The west elevation of Lincoln Mill (building L) facing east.
- 6. The west elevation of the Ravine Mill (building A) facing east.
- 7. The north facade of the Ravine and Rag Mill (buildings A and B) facing southeast.
- 8. The east elevation of the Rag Mill (building B) facing southwest.
- 9. The south facade of the Ravine and Rag mills (buildings A and B) facing northeast.
- 10. The south facades of buildings G and H of the Fox River Mill facing north.
- 11. The south facades of buildings D, E, I, and F of the Fox River Mill facing northwest.
- 12. The south facades of buildings D, K, J, and I of the Fox River Mill facing north.
- 13. The south facade of building C of the Fox River Mill and the east elevation of the Rag Mill (building B) facing northwest.
- 14. The south and east sides of the Lincoln and Ravine mills and the south side of the Fox River Mill facing northeast.
- 15. The south facades of buildings C, D, K, J, I, and F of the Fox River Mill facing northeast from Lake Bridge.
- 16. The north facade of building C and the west end of the south facade of building D of the Fox River Mill facing south.
- 17. The north facade of building D of the Fox River Mill facing south.
- 18. The north facade of building D of the Fox River Mill facing south.
- 19. The north facade of buildings G and H of the Fox River Mill facing southwest.
- 20. The south facade of the Fox River Mill and the east elevation of the Lincoln Mill facing northwest.
- 21. The north facade of buildings C, D, and E of the Fox River Mill facing

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southeast.

- 22. The brick arches in room M, level 2 of the Lincoln Mill facing northeast.
- 23. Brick arches on level 1 of building A in the Ravine Mill facing east.
- 24. Post and beam construction and turbine housing on level 1 of building C of the Fox Mill facing north.
- 25. The roof trusses of Level 1 of building J of the Fox River Mill facing south.
- 26. The drainers in level 1 of building D in the Fox River Mill facing east.
- 27. Steel trusses of level 1 in building G of the Fox River Mill facing east.
- 28. Level 2 of building F of the Fox River Mill facing south.
- 29. Roof framing of building E of the Fox River Mill on level 5 facing south.
- 30. The brick arches on level 1 of building D in the Fox River Mill.
- 31. Roof supports of building D of the Fox River Mill facing west.
- 32. Wood supports of level 4 in building E of the Fox River Mill facing southeast.
- 33. The wood post and beam supports of the Rag mill (building B) on level 4 facing southeast.



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Water St.

Map # 2



Map # 1