

CHAPTER 2

BACKGROUND

PEOPLE ARRIVED in the Delaware Valley near the end of the last (Wisconsin) glaciation. Glaciers entrapped so much water that the ocean lay fifty miles east of the present Sandy Hook, New Jersey. As the glaciers retreated and the ocean advanced, the project area's ecology changed. With changes in ecology and population came changes in land use, which are reflected in the cultural record (Kraft 1986).

Prehistoric background

Mammoths, musk ox, horses, caribou, and walrus provided food for dire wolf, short-faced bear, and other predators. Man was among the smaller competitors in the tundra food chain, but his skills compensated for his physical shortcomings. Nomadic people of this Paleo-Indian period were among the most skilled makers of stone tools in the world. They would travel great distances to quarry the best flinty cobbles from which they made exquisite spearpoints, knives, and small tools.

Paleo-Indian hunting-gathering society lasted in the coastal plain until about 6,500 BC, when the Atlantic climate episode and the Archaic period of prehistory began (Custer 1984:31). Northern hardwood forests had replaced the tundra, the ocean had risen, and the climate was warmer. Pleistocene megafauna were replaced by smaller game, which required different hunting techniques and tools. "Micro-band base camps" of this relatively arid period often are found on slight elevations above poorly-drained spots where game might have come to drink. Even after the climate became wetter, people apparently continued to live and forage near the basins.

Archaic people fashioned tools made of quartz, a material that is less tractable than the flinty cryptocrystalline silicate materials that Paleo people had favored. Ground stone axes and other heavy tools appear during this period.

By 3,000 BC, prehistoric society was decidedly different. Because people had stopped moving around so much, regional cultural differences began to appear in the artifact assemblages. Sedentary lifestyles ultimately led to horticulture, complex religious practices, and the accumulation of more, less portable, material goods. The last prehistoric period, the Woodland, is characterized by larger groups of people living together in villages, using pottery and other heavy or fragile goods that would have been difficult to move from place to place. Woodland people tended to concentrate in more or less permanent settlements at places with abundant multiple resources, such as sites adjacent to shellfish beds on the edges of salt marshes. They sent out hunting parties, but they seldom dispersed whole populations to live off the land in the manner of their hunter-gatherer ancestors.

European-American history

Wherever Europeans have settled, they have first built highly-organized towns on the frontier, projecting all the trappings and institutions of the mother country onto the wilderness. Pioneer farmers typically follow, after the soldiers have established a semblance of civilization. The first Dutch and Swedish settlements in the Delaware Valley conformed to the frontier model: they were compact and strictly regulated, and were supported largely by supply lines from Europe or from older colonies (Heite and Heite 1986).

International competition probably delayed the region's transition to the second phase of colonization, which was a less rigidly regimented period of agricultural development. Most of the

other North American colonies moved to settle the countryside within a decade after initial settlement. The Delaware colonies, which represented both the boundary between settled land and wilderness as well as the boundary between rival nations, clustered around their fortified command posts for at least thirty years. Not until the fall of New Netherlands in 1664 was the Delaware Valley finally available to realize its potential as an open, self-supporting, agricultural colony.

The major known settlements of the period, in chronological order, were:

1626: Dutch Fort Nassau on the Delaware River near Timber Creek at the present Gloucester, New Jersey and probably another poorly-documented outpost on Burlington Island upstream;

1629: A palisaded Dutch whaling station on a tract called Zwaanendael or Swandendael, on the lower bay, now in Delaware;

1638: Fort Christina, the capital of New Sweden, later the Dutch Fort Altena, now in the city of Wilmington;

1641: A colony of Englishmen from New Haven who settled at Varckens Kill, now Salem River, New Jersey;

1643: Printzhof, or New Gothenborg, on Tinicum Island, now attached to the Pennsylvania mainland, the home of Swedish Governor Johan Printz;

1643: Swedish Fort Elfsborg on the Delaware River near the present site of Salem, New Jersey;

1651: Dutch Fort Casimir, at the present site of New Castle, Delaware, established to counter the Swedish power;

1659: The Dutch West India Company fort at Lewes, at a known site on the present Pilottown Road in the city of Lewes, Delaware; and, finally,

1663: Cornelis Plockhoy's Dutch Mennonite settlement, also on the Swanendael territory and probably on or near the site of Lewes.

None were large: the principal fortifications probably did not measure more than 200 feet on a side. The total settled area on the Delaware between 1626 and 1664 did not exceed a few hundred acres, concentrated in seven locations. By contrast, Virginia before 1622 had dispersed into 25 particular plantations, populated by about 1,200 people cultivating extensive farms. Jamestown, the Virginia capital, has yielded archaeological remains of at least 141 structures and major features, most from the seventeenth century. Largest of the Delaware settlements was Fort Casimir and its adjacent settlement of New Amstel, which grew to contain 110 houses within eight years after its founding in 1651.

The town of Lewes was established between 1670 and 1680 on the banks of Lewes Creek, on or near the site of the Plockhoy colony. Lewes was the administrative, legal, and religious center of the new Sussex County, which was roughly coterminous with the Zwaanendael grant. Kent County was carved out of the upper part of this territory in 1680.

History of the project vicinity

Broadkill Hundred lies in the Swaanendael tract, site of the second settlement of Europeans in the Delaware Valley.

Its Dutch name is a clue to the Broadkill's attraction to early settlers, who depended upon waterborne commerce within the thinly settled vastness of New Netherlands. The Broadkill continued as a significant part of the Delaware Bay trading network for two centuries.

Its location at the head of navigation, coupled with abundant water power, gave the Milton townsite a natural advantage that entrepreneurial settlers exploited.

Mills on the Broadkill included both gristmills and sawmills, for the timber of the area was highly valued for shipbuilding. Shipyards at Milton began during the eighteenth century and flourished through the nineteenth, consuming the virgin forests of Sussex County. There were also bark mills and fulling mills, to process the tanbark and wool from the hinterland.

One of the first settlers in Broadkill Hundred was Helmanus Wiltbank, a Swede who could have arrived as early as 1650, according to legend. His son applied in 1695 for permission to build a mill on Mill Creek branch (Beaverdam Branch) of Broadkill, beginning a tradition of milling on the powerful watercourse that culminated in the building of the first gristmill at the project site. (Scharf 1888:1256).

The southerly branch, known as Long Bridge Branch or Osborne's Branch, was the site of a mill seat mentioned in a survey to Henry Osborne in 1733. This later was called Draper's Mill, and came to be part of the Wagamon's Mill property under the name of Diamond Pond (Sussex County Warrants and Surveys O2 #1).

The townsite south of the Broadkill was part of the Milford tract patented in 1686 to James Gray. It eventually came into the hands of George Conwell, who sold lots around the lower landing.

The north side of the river, around the upper landing, was owned by Major William Perry [Peery], an officer in the American Revolution; he also sold lots around the landing.

A bridge at the present Union Street, below the head of navigation, was built in 1793.

By 1807, the community had grown into a prosperous commercial town, to which the General Assembly gave the name of Milton, honoring the English poet. Two years later, an assessment showed the town with four stores and seven granaries, in addition to shipyards.

Among the industries in early Milton, shipbuilding is perhaps the best known. The town was also a shipping point for bog iron ore and tanbark.

Bog ore from the Broadkill was carried across to New Jersey furnaces, principally during the period 1815-1840.

History of the mill seat

Fergus' Bridge was built before 1794 over the marsh at the head of navigation of Broadkill River. To cross the riverside bog, a causeway was associated with the bridge; this structure was later incorporated into the earthwork of the present Wagamon's Pond dam.*

The road over the bridge, now Mulberry Street, was a major north-south road. Major William Peery is the first recorded owner of the bridge, which he conveyed to James Fergus.

He was a Scottish merchant who had established a store on the site of Milton before the American Revolution. James Fergus, "of Broadkill" was buried by the Presbyterians in 1798 (Delaware church records volume 5, records of Lewes Presbyterian Church).

His widow, Mary, wrote a will, probated in 1812, by which she provided for her daughter Eliza, a minor child named James Mason, son of Joseph Mason, and James Martin, who was occupying her store on the south side of Broadkill. Eliza, who was then a minor, received most of the estate. Soon thereafter she married John D. Smith, who thereby came into possession of the Fergus properties including the northerly approaches to bridge.

* Unless otherwise noted, the sources for this section may be found in the descent of title, in the appendix to this paper.

Upstream from the project area, on the south branch of the river, was a sawmill and bark mill, known as Draper's Mill, owned by William W. and John S. Conwell. Their mother had left them and their sister most of the south side of the Broadkill here.

On the other branch, known as Lavina's or Pemberton's Branch, was a fulling mill. This mill was upstream from a crossing known as Lavina's Causeway, still a crossing point today.

On April 25, 1814, the Conwell brothers executed a partnership agreement with Dr. Joseph Maull to build a mill at Fergus' Bridge. The partners did not own the mill seat itself, but they owned most of the land that would be inundated, as well as surrounding property on the south bank.

John S. Conwell's one-sixth share in the enterprise was to be bought with timber sawed at his mill (Sussex County Deed Book 33:118). The tracts had been part of the estate of their mother, Eunice Conwell, divided by the Orphans Court in 1800 into three parts for them and their sister (Sussex Orphans Court Volume H:115). Dr. Maull's share apparently was monetary, for he owned no land in the affected area.

The partners had the mill site surveyed, and found that they would inundate 52.5 acres, close to the actual pool size today. Another 22.5 acres on Pemberton's Branch above Lavina's causeway and below the old fulling mill was included in the survey but not as part of the pond (Legislative Petitions, January 5, 1815).

Their petition to the General Assembly pointed out that they owned much of the lowground above Fergus' Bridge, as well as one of the upstream mill seats already in existence. The new mill would take advantage of both main branches of the creek, and ensure a constant head of water, they claimed (Legislative Petitions, January 5, 1815).

The partners posted a notice announcing their intent to apply to the General Assembly for a charter to build the mill, which excited a flurry of counter-petitions asking for denial. One, dated December 29, 1814, pointed out that there were already eight gristmills and eight saw mills within four miles of the village, one of them not a half mile away. The large pond of stagnant water created by the mill was deemed to be a health hazard. The mill also would create a sandbar in the river below, they argued, cutting off Milton's navigation. It would also flood the Lavina's Causeway to Georgetown. The petition bore 29 signatures, including other mill owners. A petition in favor of the mill carried 44 names, but 21 of them signed a petition withdrawing their support and citing substantially the same reasons found in the opposition petition (Legislative Petitions, January 5, 1815).

John D. Smith and John Dorman, owner of land in the south bank, petitioned against the mill, arguing that the applicants did not actually own the mill seat, as was usually the case in mill condemnation cases. Dorman's woodlot, containing valuable cedar, would be inundated. Smith argued that the mill dam would flood the cellar of his house (Legislative Petitions, January 5, 1815).

The Smith and Dorman petition was dated January 2, 1815. Dr. Maull responded the next day, sending surveyors to Smith's shop, which stood on the point of high land near the north end of the proposed dam. They found the shop to be sixteen feet above the high water mark, and therefore not likely to be flooded. Their report was heard with the rest on January 5 (Legislative Petitions, January 5, 1815).

In spite of the controversy, the law authorizing the pond was passed February 9, 1815. It provided for the mill operators to obtain ownership of the land under their pond, much of which they already owned. Several strings were attached to the grant, meeting certain objections to the dam proposal.

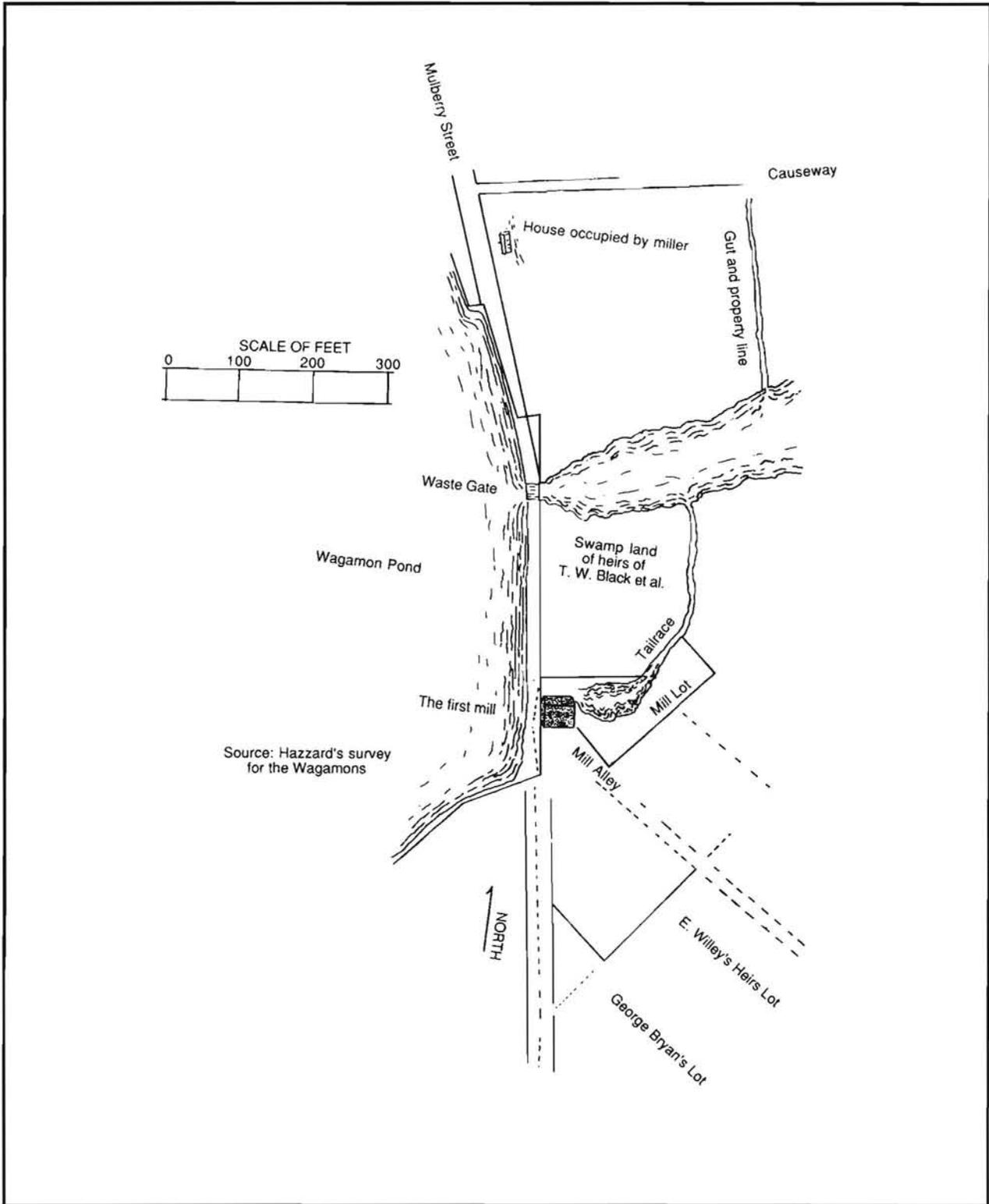


Figure 6: Project area in 1903, based on Hazzard

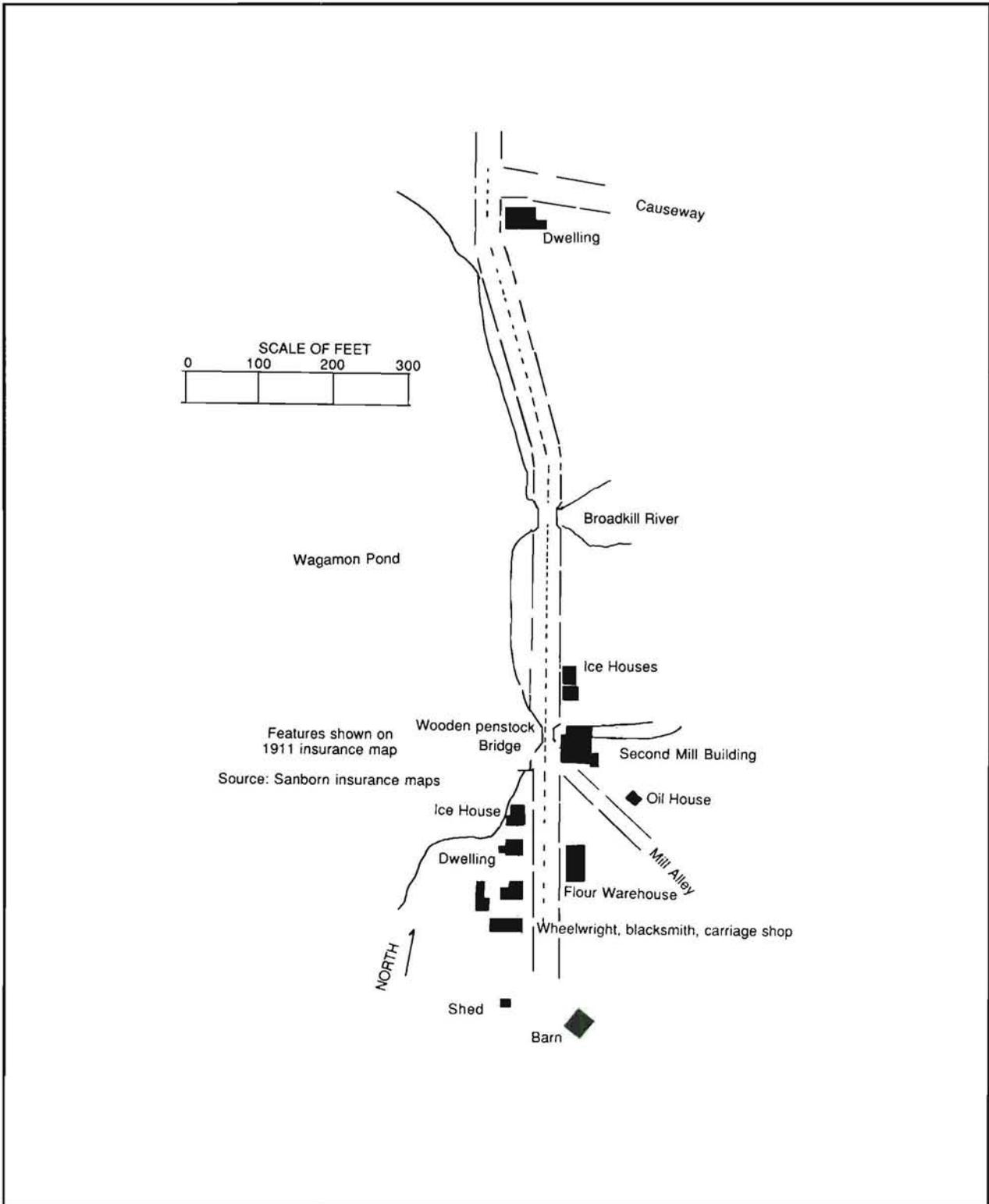


Figure 7: Project area in 1911, based on Sanborn



Plate 5: View of the first Wagamon mill , from the pond, looking east, shortly after it was built in 1901, courtesy of William Wagamon.

In response to Smith's protests, the law provided that the builders, "their heirs, and all and every future owners and owners or possessors of the mill..." are required to maintain a "scow navigation" from Smith's granary and wharf to the lower bridge. The granary stood on the north bank of the river, just below the bridge (FIGURE 2, PAGE 5).

The mill owners also were required to maintain Lavinia's (Lavina's) causeway (Delaware General Assembly Enrolled Bills 5:369).

On June 23, 1815, Samuel Ratliffe conveyed the south end of Fergus' bridge to Dr. Maull. Ratliffe was the widower of the Conwells' sister Sarah, and the property was part of the estate their mother had left them (Sussex deed book 32:79). It was necessary to condemn a quarter-acre on the north side of the river from John D. Smith.

The partnership of Dr. Joseph Maull and William W. Conwell ended with Conwell's death. By an amicable action, it was decided that David Hazzard, Conwell's executor, would convey the rest of the mill's ownership to Dr. Maull (Prothonotary Reference Docket 1810-1821: 222; Sussex Deed Book AM-35:161).

Governor Samuel Paynter of Milton was one of the leading citizens named in the act incorporating the Sussex Canal Company, passed by the Delaware General Assembly in 1833. The

canal was to cross Sussex County from the head of Nanticoke to the head of Broadkill, which would have meant building a lock into the mill dam. Other founders included the leading businessmen from Georgetown and the Nanticoke drainage:

Isaac Tunnell
David Hazzard
Samuel Paynter
Jesse Green
William D. Waples
Solomon Prettyman
Jacob Cannon
Caleb Ross
Robert H. Griffith
Thomas Robinson, Jr.
Henry J. Rodney
John S. Harris
Caleb S. Layton

These were the business and political leaders of Sussex County, and not just of the Milton area; it was clearly intended to be a regional enterprise. Business interests in the list included timber and iron ore operations, which would have most directly benefitted from a canal into the interior swamps. The Georgetown merchants would have attained an outlet to the sea, which their location on the peninsular divide denied them. In case the canal should not develop, the company was authorized to build a railroad or turnpike instead (Enrolled Bills 1833: 257).

The canal never developed, and the pond remained merely a local power source. Other interests eventually built a railroad to Milton, thus ensuring the town a role in lower Delaware's period of industrial prosperity during the second half of the nineteenth century.

Dr. Maull died in 1846 while serving as acting Governor, and Samuel R. Paynter, son of former Governor Paynter, bought the mill, beginning his family's half-century association with the property.

After Samuel R. Paynter died, the Orphans Court ordered the mill and other properties divided among his widow Sally and his children. The estate was surveyed in 1853 by John C. Hazzard, who also would make the 1903 survey for later owners.

In 1865, Sally A. Paynter insured the mill with Kent County Mutual Insurance Company, describing the mill as a two-story frame mill run by water power, valued at \$6,000, of which she insured \$4,000. In 1867 the policy was transferred to John A. Paynter, Custis W. Wright, and Edwin R. Paynter; the Wright share was transferred in 1880 to Emma R. Wright (Kent County Mutual Application Book III).

The Paynter heirs, Edwin R., Rowland C., and Hannah E. Paynter and Emma R. Wright, conveyed the mill property to John T., Hamilton K, and Daniel Wagamon by deed dated September 20, 1901. The Wagamons also bought Paynter's steam mill on Mill Street from their miller, George Andrew Bryan.

The new four-story Wagamon Mill (PLATE 5, PAGE 15) was finished in 1901, sporting the newest in Allis Chalmers roller equipment valued at \$5,600. It was thirty feet square, and stood back sixteen feet back from the raceway bridge.

A few years later, Hamilton and William Wagamon bought the other shares and became co-owners of the mill. In 1917, they built the present penstock and waste gate and invited the county to pay for construction of the two bridges that still exist on their dam.

The Levy Court of Sussex County on May 22, 1917 agreed to build a superstructure with I-beams and a reinforced concrete slab with two-inch wearing surface of crushed stone in a bituminous binder. The resolution required that the county engineer review the plans and that a county inspector supervise the job (Levy Court minutes, Delaware Archives).



Plate 6: View of the first Wagamon mill, looking east about 1906, courtesy of William Wagamon

The gap between the bridge and the mill building was spanned by the county to provide a safe walkway for school children, and the Wagamons drove pilings into the upstream side of the building to prevent erosion damage.

There was an icehouse west of the mill, on the side of the pond, and another icehouse on the downstream side of the dam just north of the mill. The last ice was cut around 1934, according to recollections. In 1926, a second mill building, also thirty feet square, was added to the rear (BACK COVER). The turbines were replaced in 1938 with 30-horsepower, 42" turbines. (William Wagamon, personal communication).

The first Wagamon mill burned in 1943, to be replaced by the Diamond State Roller Mills plant. The mill included a stone for feed grinding, which was powered by the turbine (PLATE 9).

In 1946, the Diamond State Roller Mills was incorporated. Partners were William B. Wagamon, Richard Wagamon, and William B. Wagamon, Jr. They conveyed their shares of the mill to Henry C. Wagamon, who was a non-participating landlord.

The sheriff sold the company's property in 1958 and the business closed.



Plate 7: DeIDOT file photo of Bridge 808, with the mill still standing, looking southwestward at the downstream side of the waste gate.

The mill itself changed hands in 1963. The new owner, John Thatcher's Cool Spring Power and Water Company, did not operate the mill, but maintained the pond. The buildings fell into ruin.

Local residents salvaged the building materials, creating a safety hazard that the fire company resolved by torching the building finally in 1972. On a fall Sunday afternoon, the firemen packed straw in the upper stories of the buildings, and then set them alight. The results were spectacular (PLATE 10, PAGE 21).

Shortly thereafter, the property was sold to Joseph R. Hudson and Stanley L. Thompson. They gave the pond and mill property to the State of Delaware for the use of the Division of Fish and Wildlife. The deed described a pond of 59 acres, more or less, and cited the 1853 survey lines, which in turn cited the 1820 boundaries, indicating that the present impoundment is the same as the original 1815 dam.



Plate 8: DelDOT file photo of Bridge 808, looking south along the road toward the mill

Cartographic evidence of project area features

The earliest map showing manmade features in the project area is a survey for Major Peery, which identifies his new wharf, near the present Union Street bridge. The location of Peery's (later Fergus') bridge and causeway is apparently the same as the present dam (Sussex County Certificate Book V-20, page 114).

South of the river, the estate division of Eunice Conwell (Sussex County Orphans Court volume H, page 115), locates the town land and the old upper (Draper's) mill dam

During the busy two weeks before the General Assembly chartered the mill, both sides in the issue made maps of the project area, filed in the legislative petitions for January 5, 1815.

John H. Burton's survey of the proposed mill pond for the petitioners shows all the features above the "Upper Bridge or Ferguses Bridge," including the old "crossing place" or ford over the southwest branch, behind the modern school site.

Another plot by Lawrence Riley, also enclosed with the petition, is the earliest street map of Milton. It shows John D. Smith's stable, his house, and his waterfront granary. The site of Peery's old wharf had become the location of the lower bridge. No structures are shown near the mill site.

Thomas Lank, Eli Hall and George Conwell provided the first vertical information when they measured the elevation of John D. Smith's shop at sixteen feet above high water, and his stable at eight feet nine inches.

John C. Hazzard, during his long career as a surveyor, drew four known maps of the project area, at least three of which have survived. The three maps (PLATE 3, PAGE 7, FIGURE 5, PAGE 11) include the earliest mill dam, and together with current map information, demonstrate that Mulberry Street in the project area has not moved since 1815.



Plate 9: Diamond State Roller Mills, 1946-1958,
courtesy of William Wagamon

In 1853, he plotted the estate division of Samuel Paynter (Sussex Orphans Court Case P-9). This map shows the dam, the mill, and a house on the former Smith lot near the location now occupied by Norma's restaurant.

The house in question was at different times occupied by the miller, and was usually owned by the mill owners. It appears in clearer detail on Hazzard's 1887 map of Milton (PLATE 3), which replaced a lost 1867 original. This map, which hangs in the town hall, also shows several buildings along Mulberry Street south of the dam, at the southern extremity of the project area.

The 1903 plan (FIGURES 5, 6, PAGES 11, 13) that Hazzard made for the Wagamons (Sussex County oversize surveys, Delaware Archives) also shows the house, as if it were standing on a hillock, near the present location of Norma's Restaurant.

Sanborn insurance maps for Milton begin in 1911, and the series ends with a 1945 revision of the 1923 drawings. In the 1911 map (FIGURE 7, PAGE 14), ice houses are shown next to the mill in an area that in 1903 had been marsh. On the pond shore next to the dam was another ice house. A flour warehouse and an oil storage building had been added to the mill complex by 1911.

Across the creek, at the corner of Mulberry and Magnolia streets, the present house had replaced the earlier house.

By 1923 the Wagamons had added another warehouse on the south end of the dam and an auto repair shop stood near the north end of the dam. According to a former owner of the mill, the lot north of the dam also included, at different times, a bed spring factory and a plant that made acid out of peach pits.



Plate 10: Diamond State Roller Mills ablaze, courtesy Millard Jenkins