



MORRIS CANAL

LIBERTY STREET & JFK DRIVE

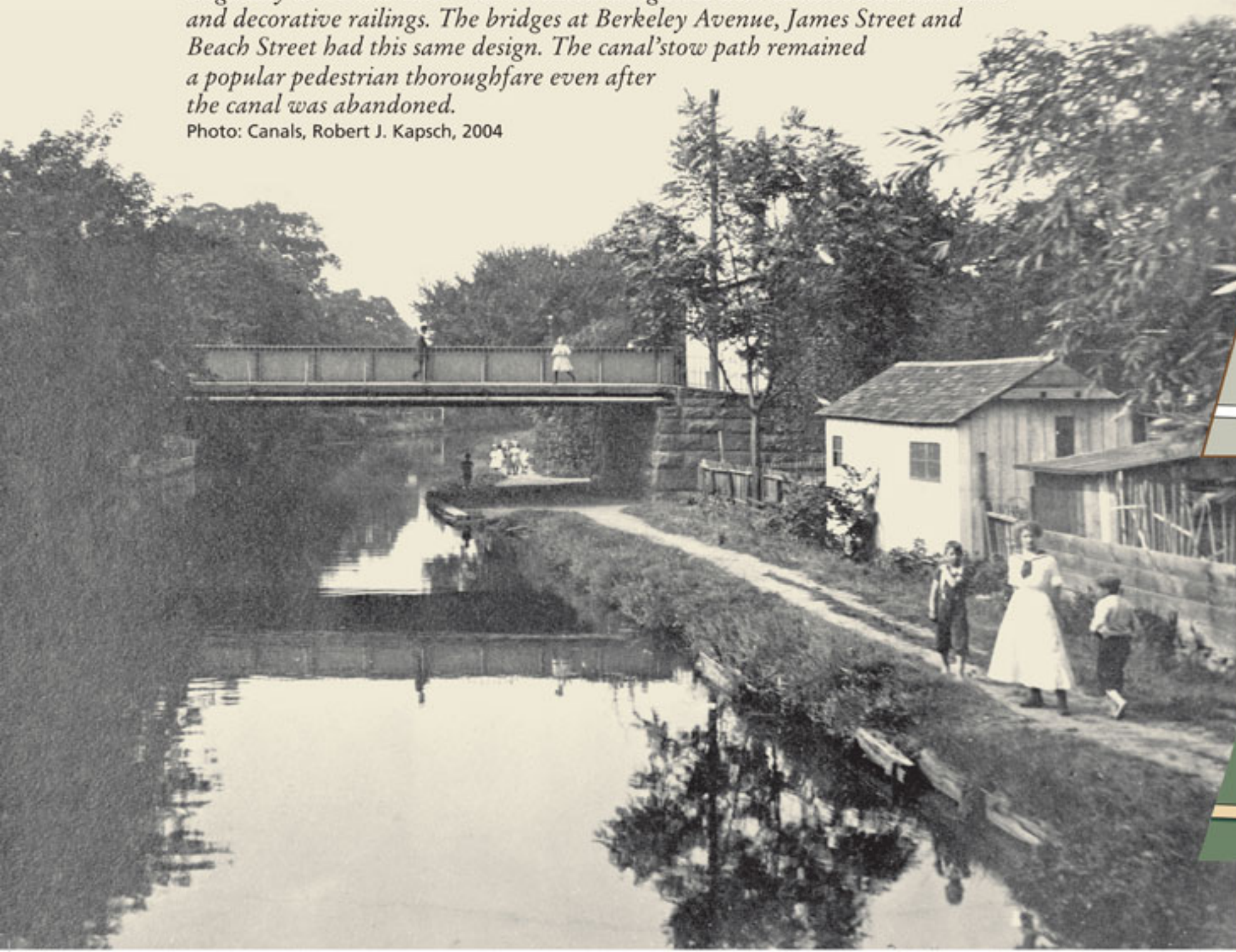
When the Morris Canal was abandoned in 1924, the property was offered for sale to the municipalities through which it ran.

Bloomfield bought their five mile section. Mayor Demarest was hoping to use the right of way to build a high speed trolley line to connect Bloomfield to Paterson and Newark. However, the plan failed and the canal sat abandoned for 30 years.

Today the Garden State Parkway and the roads that speed traffic through modern Bloomfield have removed most traces of the old canal. However, with the help of maps and historic pictures it is still possible to follow its route and imagine a time when canal boats passed by, transporting heavy loads of coal to Jersey City. Along the way the canal created business opportunities in places like Bloomfield that turned sleepy farming villages into thriving urban communities. Along this section of the Greenway the locations of sawmills and coal yards, once common features along the canal, can still be identified.

1 BELOW: South of Liberty Street looking north. As traffic increased on the main thoroughfares through Bloomfield, many of the bridges over the canal were originally wood and later reconstructed using steel with cantilevered sidewalks and decorative railings. The bridges at Berkeley Avenue, James Street and Beach Street had this same design. The canal's tow path remained a popular pedestrian thoroughfare even after the canal was abandoned.

Photo: Canals, Robert J. Kapsch, 2004



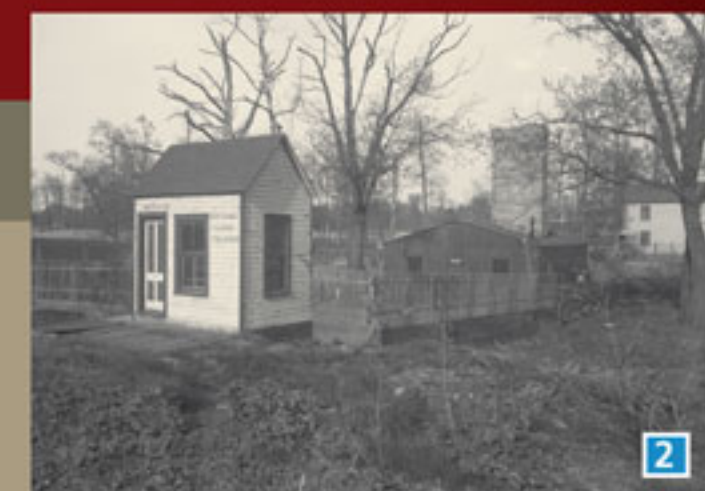
EXPLORE THE CANAL HISTORY

Although the canal was built to deliver anthracite coal to major markets such as Newark, Jersey City and New York, it also made a steady supply of coal available to the factories and coal yards in towns like Bloomfield. Over the years, this expanding business environment created a population and housing boom. Workers moved to Bloomfield for jobs in the factories and coal was used for cooking and home heating.



The Lion File Works was located along the canal between Beach Street and Monroe Place. The building had been the saw mill and box factory for the Peloubet Organ Company and in the early 1900s became the Jas. E. Brooks Co. Structural Steel Works.

Photo: Nathan Russell Collection, Glen Ridge Public Library



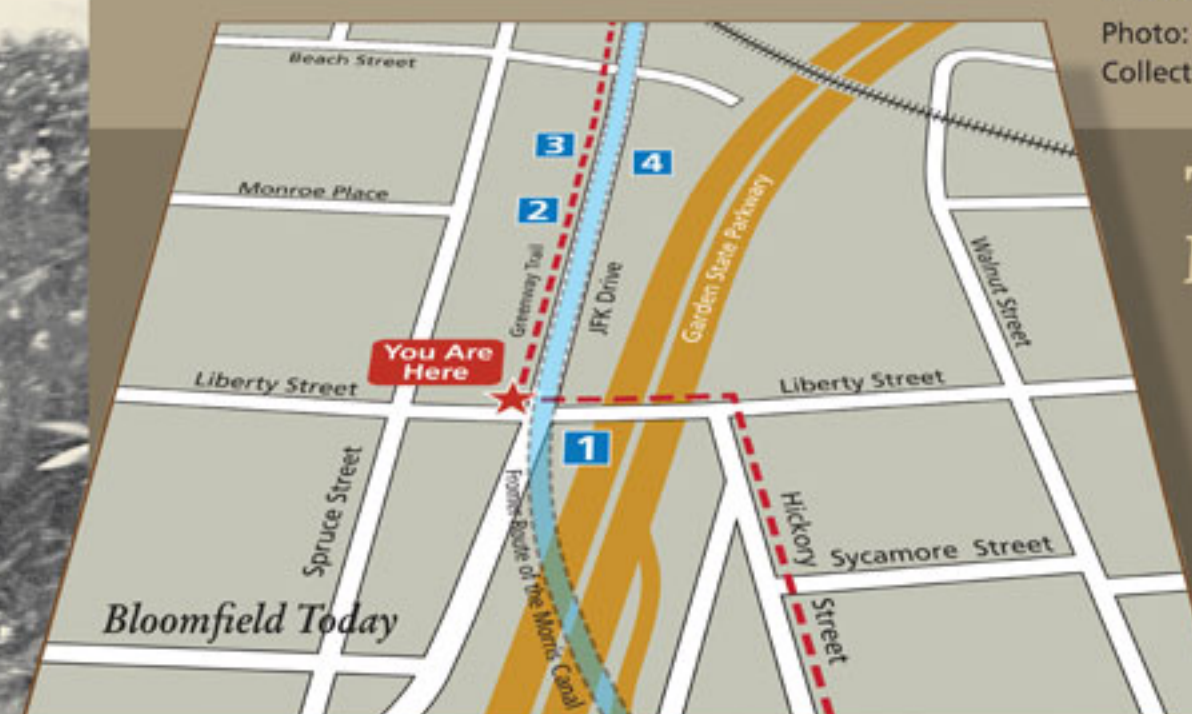
W.M. Cutler Coal Yard was located just south of the Lion File Works at the foot of Monroe Place. The sign on the coal yard scale house reads "Best Grade Lehigh Coal & Wood."

Photo: Nathan Russell Collection, Glen Ridge Public Library



North of Liberty Street near Beach Street looking south at the Liberty Street bridge in the distance. Across the canal, on the right, you can see the chimney in the back of the Cutler coal yard property and the loading dock behind the Lion File Works.

Photo: Charles Warren Eaton in the Priscilla Douglas Polkinghorn Collection, Historical Society of Bloomfield



The Route of the Morris Canal Today

When the Morris Canal was completed in 1831 the area that would become Bloomfield was mostly open farmland. However by the end of the 19th century an influx of residential neighborhoods led to the development of the street pattern that still exists today. To meet New Jersey's 20th century transportation needs, the Garden State Parkway, a limited access highway, was built across Bloomfield in the 1950s. To reduce local congestion and feed traffic to the Garden State Parkway, the route of the abandoned Morris Canal became an artery originally called Morris Canal Highway, renamed John F Kennedy Drive in 1964. Use the historic feature on the maps to the left to help visualize the route of the canal in today's landscape.



MORRIS CANAL

MORRIS CANAL LOCK 15 EAST

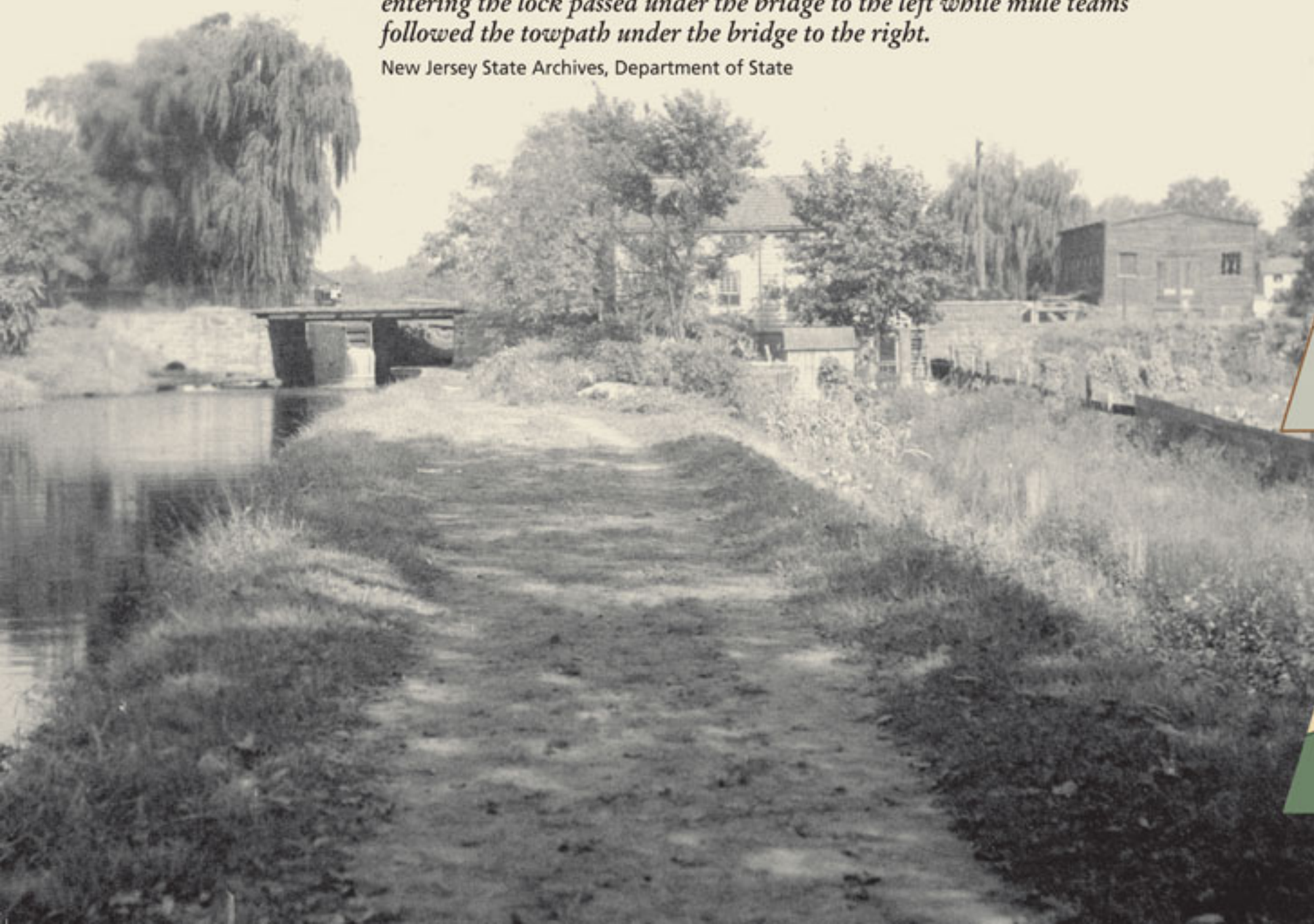
At Bloomfield, Lock 15 East raised and lowered canal boats ten feet. Above and below the lock, level sections of canal followed the contour of the land until a lock or inclined plane was required. Boats heading east needed to descend an additional 100 feet before reaching tide water on the Passaic River at Newark a little over five miles away.

From dawn to dusk, a lock tender worked passing boats through the lock. When the canal opened in the morning, he was likely to find a long line of boats waiting to use the lock. His work day might last as long as 14 hours. He needed to keep things moving as boatmen pushed their teams to clear the lock and make it to Newark before the canal closed for the night.

The lock tender kept things organized as boat crews maneuvered their heavily loaded boats in and out of the narrow lock chamber, a tricky task for a mule powered canal boat with no engine and no reverse. After closing the lock gates he adjusted wicket valves to fill or empty the lock raising or lowering the boat. The small shanty at the upper end of the lock sheltered the drop gate controls and helped protect the lock tender from the weather.

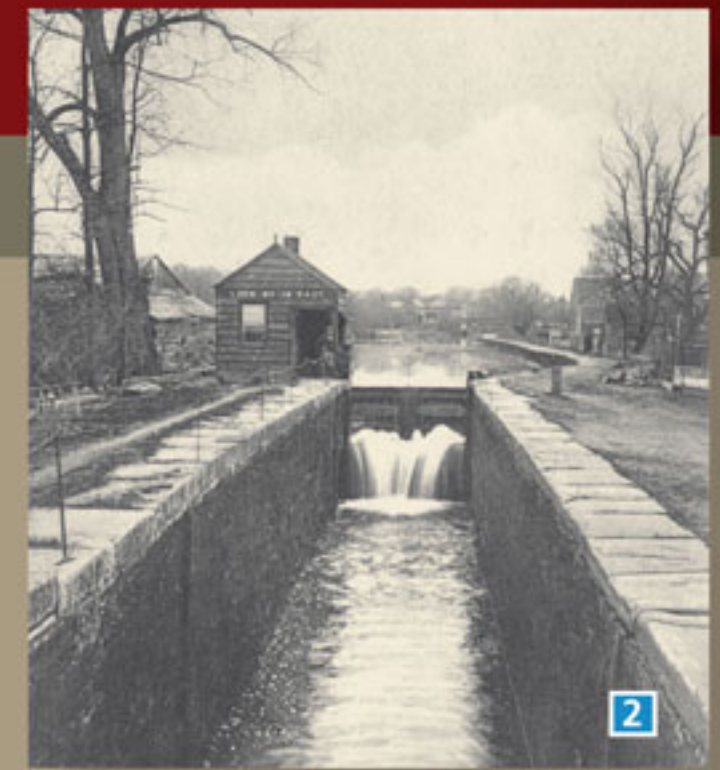
1 BELOW: A view from the tow path south of Montgomery Street approaching Lock 15 East. The lock is just beyond the bridge. Boats entering the lock passed under the bridge to the left while mule teams followed the towpath under the bridge to the right.

New Jersey State Archives, Department of State



EXPLORE THE CANAL HISTORY

Engineers planned the route of the Morris Canal as a series of levels, stepping like a staircase, up and over the New Jersey Highlands. Locks and inclined planes raised and lowered canal boats between levels. A series of 23 locks and 23 inclined planes raised and lowered canal boats between levels. At Lock 15 East in Bloomfield, boats were raised 8 feet before traveling west through Clifton, Little Falls and Patterson on their way to Pennsylvania.



ABOVE: Lock 15 East from the Montgomery Street Bridge looking north.

BELOW: On the right, Thomas Monaghan stands in front of the house in which he was born. His father was lock tender at Lock 15 East for thirty years.

Courtesy, Newark Public Library.



LEFT: The lock tender's shanty sheltered the controls that opened and closed the drop gate at the upper end of the lock. Beyond the lock is the Bloomfield Coal and Supply Company basin where boats loaded and unloaded coal. The coal piles can be seen in the distance on the left.



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MORRIS CANAL

EXPLORE THE CANAL HISTORY

MEMORIAL PARK LOOKING NORTH

Although most remains of the canal are gone, pictures can help us imagine how Bloomfield looked when the Morris Canal was an important part of the landscape. As you stand here at Memorial Park looking north, the canal would have followed the route of JFK Drive toward Foley Field. Memorial Park is the former location of the Thomas Oakes & Company mill pond. In the distance would have been the Third River Aqueduct and the James Street Bridge.



3 LEFT: This side view of the Third River Aqueduct shows the heavy truss work and masonry abutments that supported the wooden aqueduct trunk.

Photo courtesy of Robert Goller and the James Lee family

4 BELOW: North of the Oakes Mill Pond, the canal first crossed over Third River and then under the James Street Bridge. In the picture below the wooden bridge to the left crosses Third River.

Photo by Charles Warren Eaton, Pricilla Douglas Polkinghorn Collection, Historical Society of Bloomfield.



1 LEFT: The Canal Street footbridge was built by Bloomfield citizens to enable Thomas Oakes & Company woolen mill workers to cross the canal to get to and from work. It connected Canal Street, now called Maple Street, to the canal towpath. The current foot bridge was built in the same location.

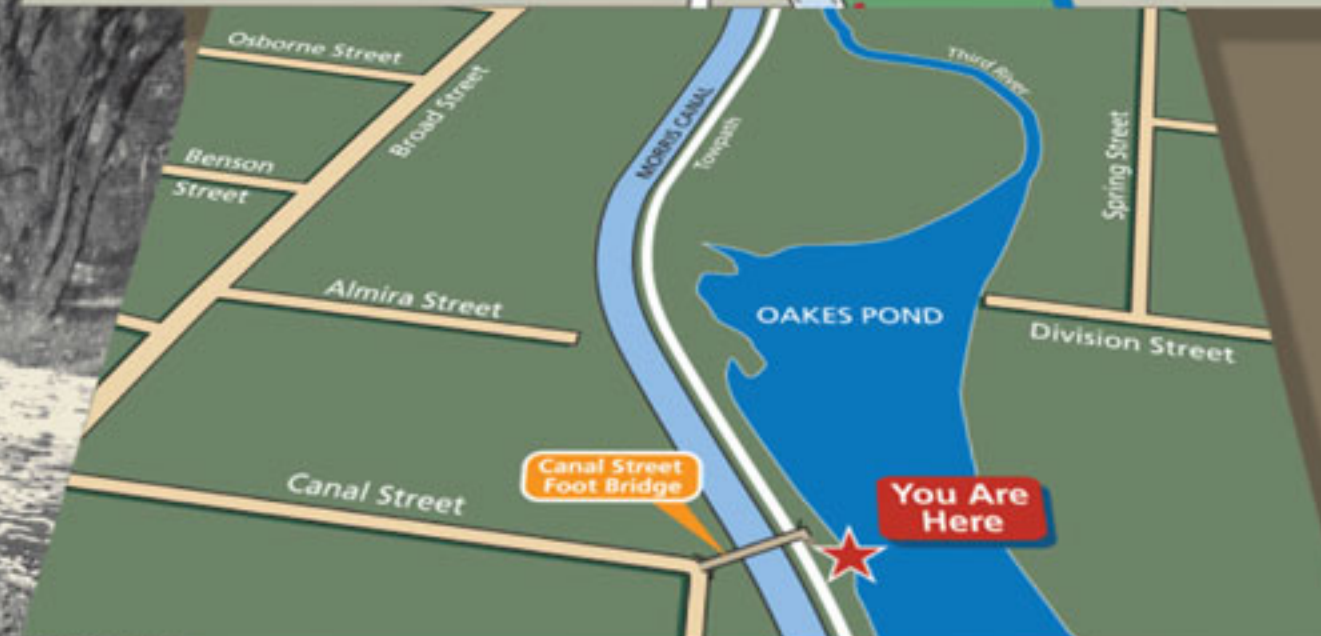
2 RIGHT: This view is from the north of your current location looking at a partially frozen Oakes Pond. The pond supplied Oakes woolen mill with hydropower. The houses in the distance are on James Street. The mill pond was filled in to create Memorial Park and Foley Field.

Photo by Charles Warren Eaton, Pricilla Douglas Polkinghorn Collection, Historical Society of Bloomfield.



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Bloomfield 1880s



MORRIS CANAL

MEMORIAL PARK

LOOKING SOUTH

Although most remains of the canal are gone, pictures can help us imagine how Bloomfield looked when the Morris Canal was an important part of the landscape. Looking south toward Foley Field and Memorial Park the canal followed the route of JFK Drive. South of the James Street Bridge the canal crossed Third River in an Aqueduct then travelled alongside Oakes Pond before reaching the Maple Street footbridge. Only the narrow towpath separated the canal from the pond.



1 LEFT: From near James Street looking south. The canal was a popular place to ice skate when the canal froze over in the winter. The wooden structure where the canal narrows is the aqueduct that carried the canal over Third River. The houses in the distance on the right are on Almira Street.

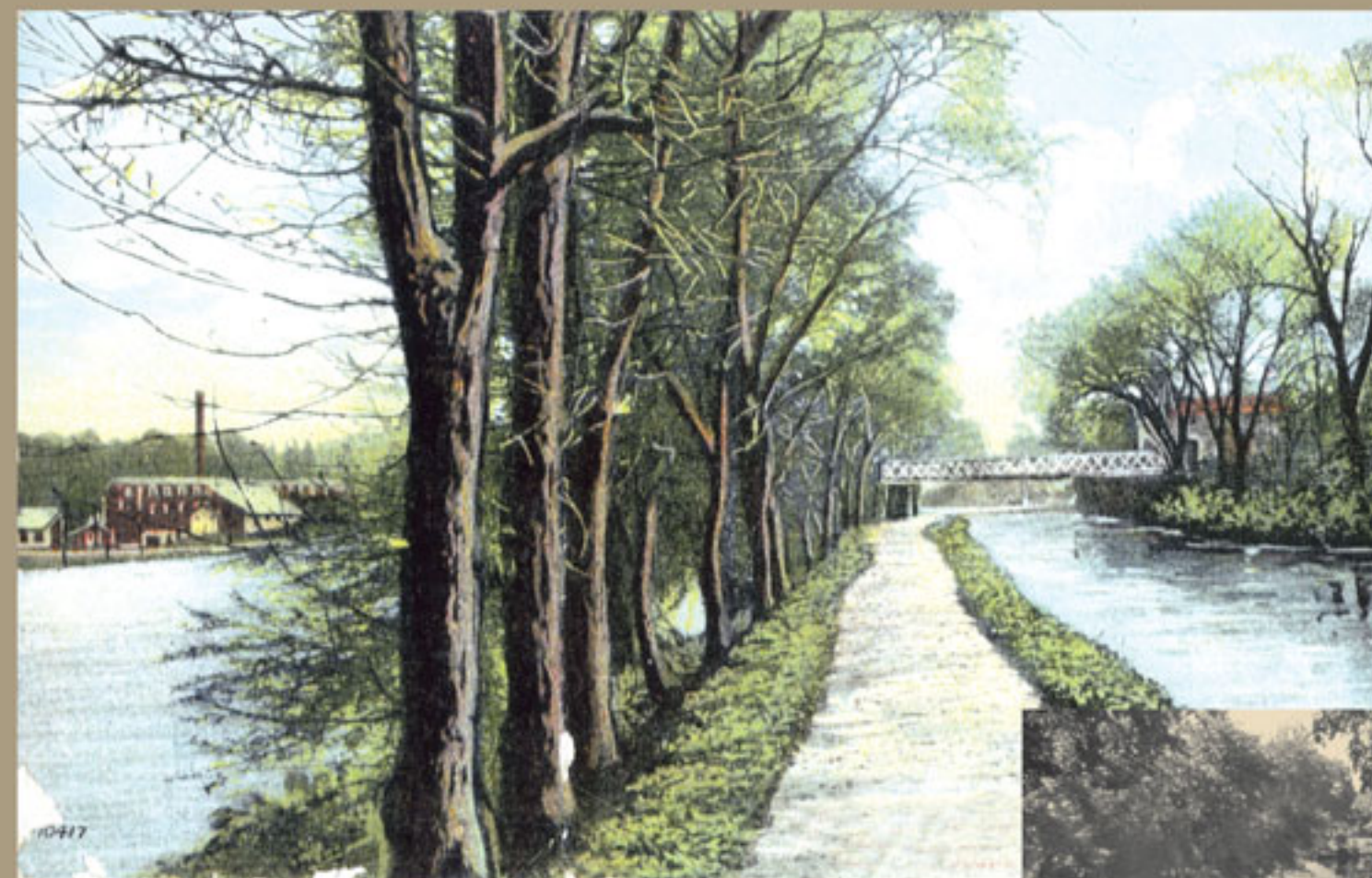
Photo by Charles Warren Eaton, Priscilla Douglas Polkinghorn Collection, Historical Society of Bloomfield.

2 BELOW: From James Street looking south. The wooden structure where the canal narrows is the aqueduct that carried the canal over Third River.

Photo by Charles Warren Eaton, Priscilla Douglas Polkinghorn Collection, Historical Society of Bloomfield.

EXPLORE THE CANAL HISTORY

As you look south along the Morris Canal Greenway, use these picture to help you visualize what Bloomfield looked like in the days when the canal was in operation.



4 LEFT: Looking south from Foley Field at the Maple Street footbridge. To the left of the towpath, you can see Oakes Pond and the Thomas Oakes Mill in the distance.

Postcard photo from the early 1900s.

3 RIGHT: View of the aqueduct from the James Street Bridge. The canal at the aqueduct was a popular swimming hole.

Photo: Historical Society of Bloomfield.



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MORRIS CANAL BLOOMFIELD



THE MORRIS CANAL 1831-1924

In 1824 the Morris Canal & Banking Company was chartered to build a canal that would carry coal, mined in Pennsylvania, to developing markets along the eastern seaboard. The canal would pass through the heart of New Jersey's iron district and provide the long-needed transportation system that would create new commercial activity and enable rustic settlements to grow into thriving industrial towns.

When completed in 1831, the canal extended 102 miles across the rugged Highlands of New Jersey, from Phillipsburg on the Delaware River, uphill to its summit level near Lake Hopatcong, and then down to New York Harbor at Jersey City. To accomplish

this, a system of 23 locks and 23 inclined planes was built to overcome the impressive elevation change of 1,674 feet. The canal's famous water-powered inclined planes were an engineering marvel that enabled canal boats to be raised or lowered up to 100 feet at a time. There was an inclined plane in Bloomfield.

Mule-drawn canal boats, transporting up to 70 tons of cargo, took five days to cross the state. In the heyday of the canal, hundreds of boats carried everything from coal and iron ore to agricultural products. The canal promoted commerce and shaped the economic development of the northern part of the state.

By the early 1900s the canal had become obsolete. However, it took until 1924 to adopt a plan to close and dismantle

the canal. The ownership of the canal's vast water resources including Lake Hopatcong, Lake Musconetcong, and Greenwood Lake, passed to the state of New Jersey.

Today, the Morris Canal Greenway, a partnership between local communities like Bloomfield and the Canal Society of New Jersey, seeks to preserve the historic remains of the canal. The Greenway will combine recreation and education by offering trails and bikeways while telling the story of this historic canal.



Morris Canal boats were pulled by mule power. This fully harnessed team has stopped to eat from feed baskets hung over their heads.

GREENWAY AT OAK TREE LANE

In 1882 the land around Oak Tree Lane was acquired by German immigrants Michael and Barbara Marzloff. The property was then open farmland extending along the towpath of the Morris Canal with a homestead that may have dated from as far back as the 1840s. Over the years the family sold off parcels that eventually became Pilch, Palmer and Pierson Streets. Marzloff descendants lived in the house until 2004.

Although the building of the Garden State Parkway erased most remains of the canal in this area of Bloomfield, a short section still survives along Oak Tree Lane. From trailheads on Watchung Avenue and Pierson Street, the Oak Tree Lane Greenway Trail allows visitors a rare opportunity to walk along the towpath and through the dry prism of the historic canal.



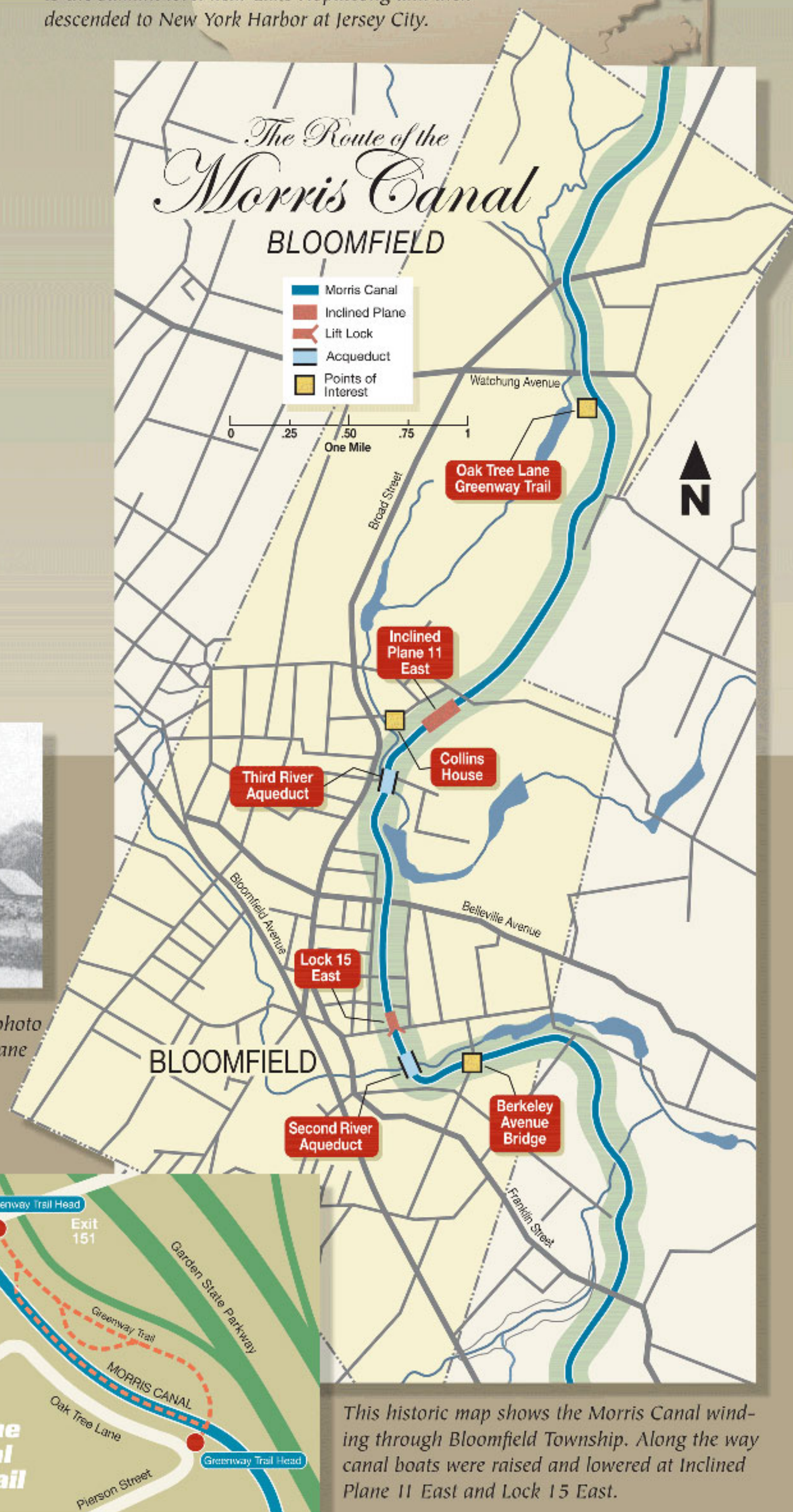
This turn-of-the-century photo of the canal at Oak Tree Lane in Bloomfield, shows the Marzloff House standing just across the towpath.



Oak Tree Lane
Morris Canal
Greenway Trail



Above: The 102-mile-long canal climbed uphill through the New Jersey Highlands from Phillipsburg to the summit level near Lake Hopatcong and then descended to New York Harbor at Jersey City.



This historic map shows the Morris Canal winding through Bloomfield Township. Along the way canal boats were raised and lowered at Inclined Plane 11 East and Lock 15 East.

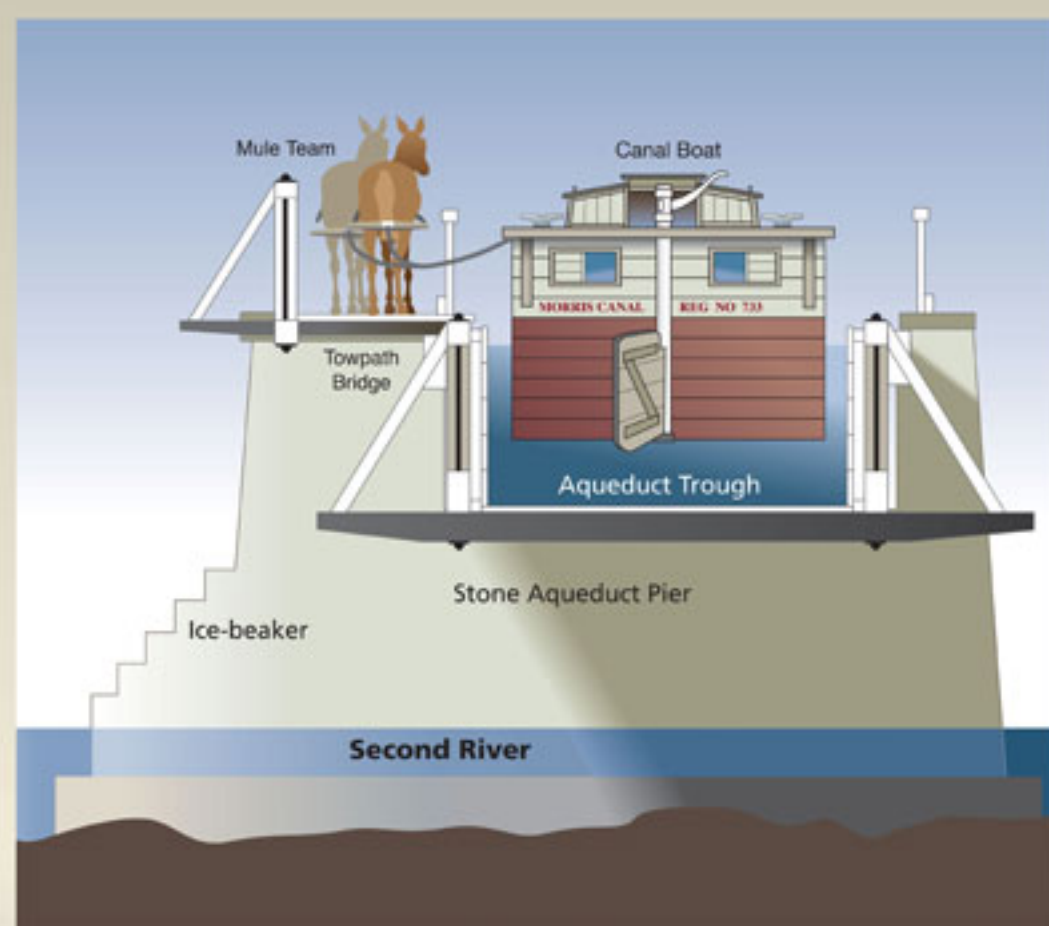


MORRIS CANAL

EXPLORE THE CANAL HISTORY

SECOND RIVER AQUEDUCT

Much of the route of the canal in Bloomfield paralleled Second and Third Rivers but at a higher level. This required the canal to use aqueducts to cross over the rivers in two places. These aqueducts were wooden water-filled troughs that allowed the canal to cross above while the river flowed underneath. A separate towpath bridge allowed mule teams to pull the boats across. Just to the east of Newark Avenue the canal crossed Second River in an Aqueduct before heading north.



LEFT: The aqueduct carried the canal across Second River in a wooden trough supported by heavy wooden trusses between stone piers. The trough was only wide enough for one boat to pass at a time.

Artwork courtesy of Joe Macasek / MacGraphics

1 BELOW: The aqueduct seen from the Newark Avenue side. The houses in the distance on the left are on Jerome Place. The Berkeley Avenue Bridge is around the bend out of view. The towpath is on the left.

Photo: New Jersey State Archives, Department of State.

2 RIGHT: In this 1880s photograph, the Second River Aqueduct is seen in the foreground with the Montclair and Bloomfield Gas Works in the distance. The wooden towpath can be seen on the right.

Photo courtesy of Robert Goller

3 BELOW: The Montclair and Bloomfield Water and Gas Works was located on the canal at West Street. The plant made gas for street lighting by heating coal in ovens called retorts. The gas was stored in a telescoping tank that filled the area outlined by the metal framework.

Photo: Nathan Russell Collection, Glen Ridge Public Library



4 RIGHT: When the canal froze over in winter, it was a popular place to ice skate as illustrated in this photograph by Bloomfield artist and photographer Charles Warren Eaton. The picture was taken from the towpath near Newark Avenue with the Berkeley Avenue Bridge seen in the distance.

Photo: Priscilla Douglas Polkinghorn Collection, Historical Society of Bloomfield



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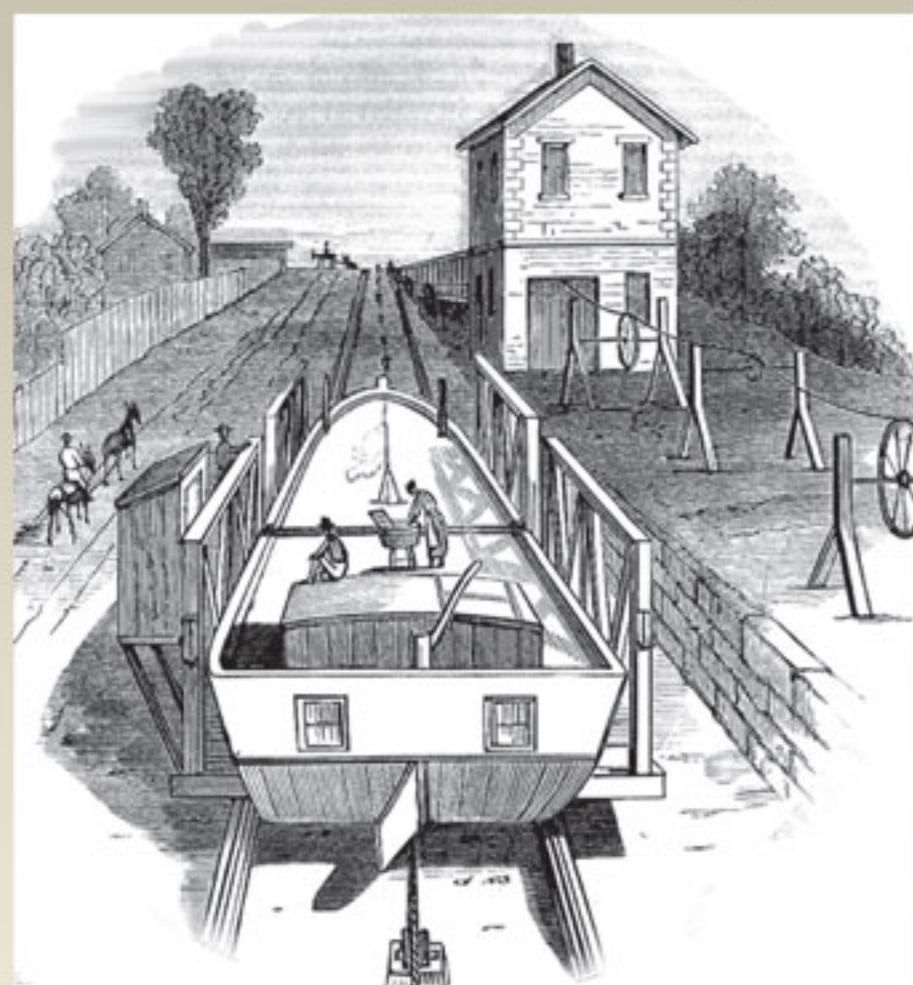
Bloomfield 1880s



MORRIS CANAL

TOP OF THE INCLINED PLANE LOOKING NORTH

Although most remains of the canal are gone, pictures can help us imagine how Bloomfield looked when the Morris Canal was an important part of the landscape. As you stand here near the top of Inclined Plane 11 East, looking north, the basin where canal boats



1 ABOVE: This drawing, published in *Scientific American* in 1882, shows a canal boat heading north ascending the inclined plane which is now the uphill slope of JFK Drive in the distance behind you.

2 BELOW: This postcard photo was taken from the top of the inclined plane (behind you) looking north. The bridge in the distance was at Franklin Avenue, now Hoover Avenue. The bridge was just behind where you are standing now.

waited to descend the plane and the Franklin Avenue Bridge would be behind you.

In 1924 Bloomfield purchased 10 acres from the Canal Company and used the land to build the Fire House behind you. In the 1950s the abandoned canal was used to create what is today JFK Drive. From the top of the inclined plane a 17 mile level section of canal stretched north all the way to Lincoln Park without a lock or plane.

EXPLORE THE CANAL HISTORY

As you look north along the Morris Canal Greenway, use these pictures to help you visualize what Bloomfield looked like in the days when the canal was in operation.



4 LEFT: This photo, taken in June of 1921, shows the drained canal prism stretching north with East Passaic Avenue on the right. Note the children exploring the canal bottom possibly looking for coal.

Photo courtesy of Jim Elder.

3 RIGHT: Franklin Avenue Bridge over the canal looking north. The bridge was just behind you where Hoover Avenue is now.

Photo by Charles Warren Eaton, Priscilla Douglas Polkinghorn Collection, Historical Society of Bloomfield.



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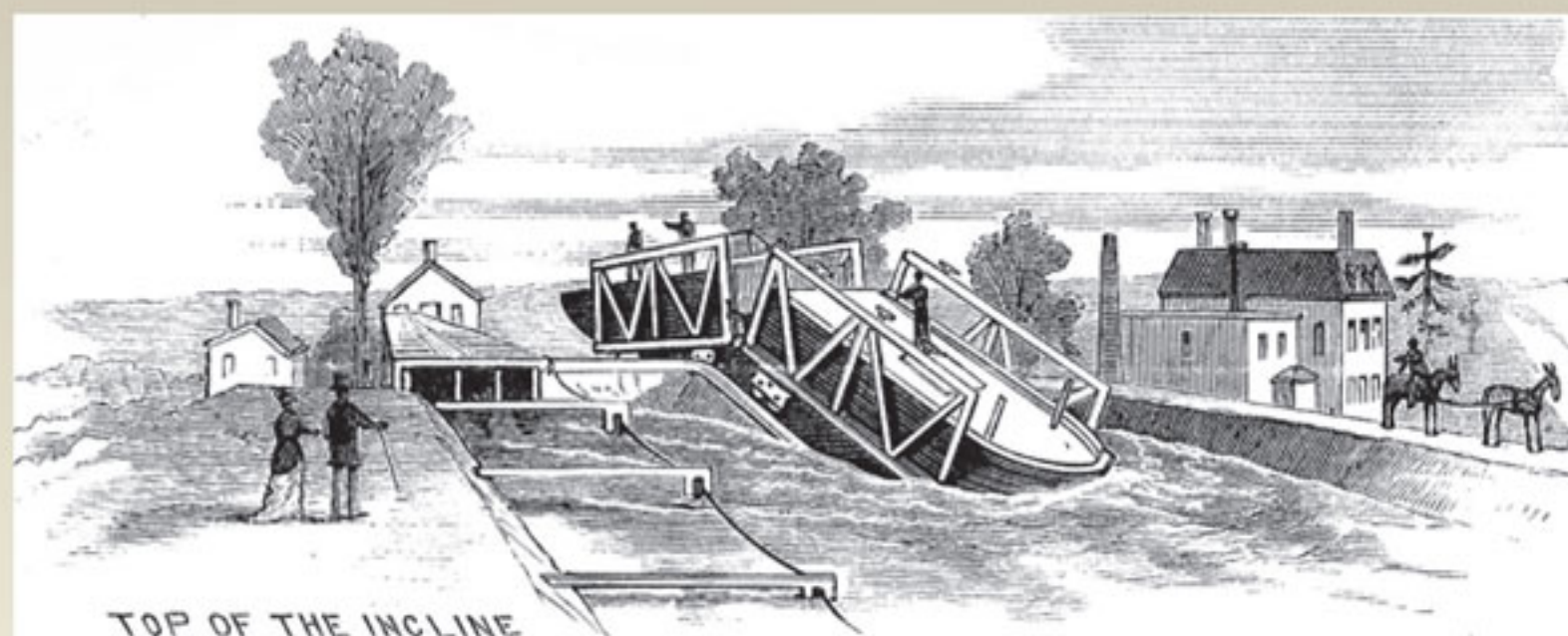
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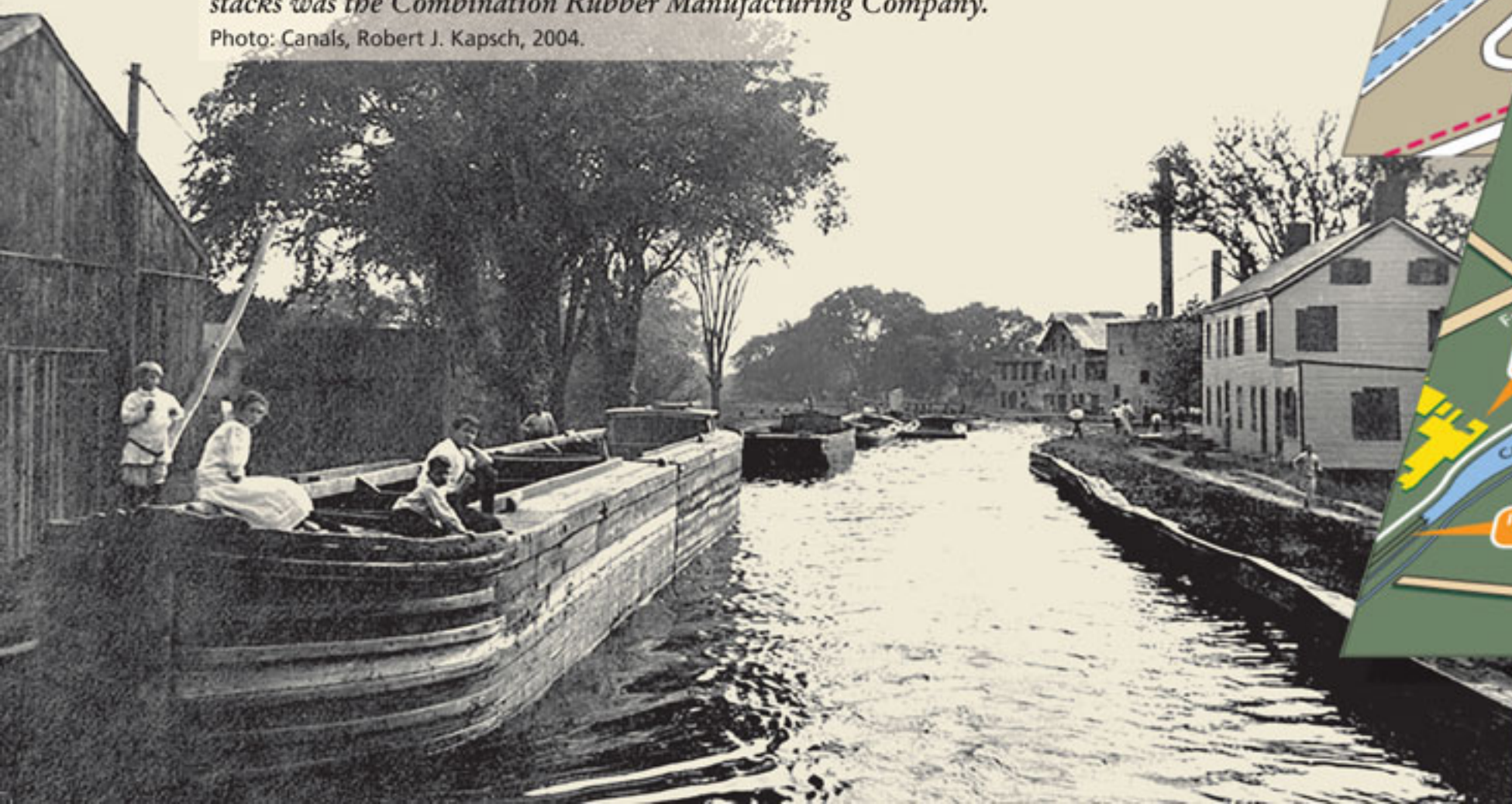
Although most remains of the canal are gone, pictures can help us imagine how Bloomfield looked when the Morris Canal was an important part of the landscape. As you stand here near the top of Inclined Plane 11 East looking south, you would see the basin where canal boats waited to descend the plane. The top of the inclined plane was an area of commerce. Boat crews heading east could shop at the canal store while waiting their turn to descend the inclined plane. Boats that reached the top of the plane after the canal closed for the evening could stable their mules in the mule barn until the plane started operating in the morning.



1 ABOVE: This drawing, published in *Scientific American* in 1882, shows a canal boat on its cradle car at the top of the Bloomfield inclined plane. Ninety foot long canal boats were built in two hinged sections so they could bend when crossing the summit of the plane.

2 BELOW: The cradle car at the top of the inclined plane can be seen in the distance in the center of the photo. The white building on the right was an inn and store and the building on the left was stables for the mule teams. The building in the distance with the smoke stacks was the Combination Rubber Manufacturing Company.

Photo: Canals, Robert J. Kapsch, 2004.



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3 LEFT: Canal boat tied up at the top of the plane. The Combination Rubber Manufacturing Company is visible in the distance on the right.

4 RIGHT: View from behind you looking south at the old Saint Valentine's Church. The carriage on the left is travelling on East Passaic Avenue.

Photo: Old Canals of New Jersey, Richard F. Veit, 1963.



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