18B / Boston Business Leading A museum of bridges spans Ft. Point Channel

by Martha Buffkin

Providing key access from the Financial District to the Fort Point Channel area-predicted to be Boston's next big boom area-are five bridges that will play an integral part in development.

A bridge held a key to South Boston's first big real estate boom in 1804. A dispute arose between Bostonians and residents of Dorchester-then a separate town-about joining their two peninsulas with a bridge.

The people of Dorchester opposed the construction of a bridge, even though it would have brought more commerce to Dorchester. With fears presaging the recent phenomenon of gentrification, Dorchester residents worried that a bridge would drive up the value of their property and, eventually, run them off their land.

The Bostonians offered the town of Dorchester \$20,000 not to fight the bridge proposal. But the people of Dorchester fought. They lost. And in 1804, the Legislature okayed the building of the first bridge from Boston to what would become known as "Southie."

Land values in that area jumped from \$40 an acre in 1803 to \$400 an acre two vears later.

A boom had begun.

Five antique bridges

Another South Boston real estate boom is under way now, with the hottest action near Fort Point Channel. The development of the Fan Pier (see BBJ, Jan. 20, 1986) and the opening of the World Trade Center on Commonwealth Pier give the Fort Point Channel area extra potential for development.

The bridges that cross Fort Point Channel are not the key to development this time, but some of those bridges pro-



The Summer Street Bridge: Tracks for the old drawbridge are still visible.

photo by Stuart Carfield

vide virtually the only access to the channel area from Boston.

Although not spectacular landmarks, the bridges have combined qualities that make the area unique. A look at the bridges' characteristics, beginning with the bridge closest to the harbor and moving up the channel:

· Northern Avenue Bridge. This bridge is the oldest turntable drawbridge in use in the country. Its construction began in 1905, and it opened to traffic in 1908. Its age is not always an advantage; in early December, it had to be closed for two days because two cast-iron pieces snapped and were replaced. The City of Boston plans to replace the bridge, though its potential as a historic landmark has created interest in working the structure into the area's development.

• The Congress Street Bridge, Built in the 1870s and rebuilt in the 1930s, this bridge is the most ornate of the channel bridges. Its fin de siecle lamps no longer light the span and the drawbridge no longer works, but the Congress Street Bridge comes alive with the approximately 150,000 tourists who visit it each year. They come to see the Boston Tea Party ship docked at its side and to buy souvenirs of Boston in the former bridgekeeper's house, now the gift shop.

• The Summer Street Bridge. This bridge, like that on Congress Street, has a fixed span-meaning the draw system is no longer usable. But the tracks for the retractile system are still visible. Up until 1958, the draw split down the middle and the two pieces retracted on "heavy trucks" that rolled on "steel rails on steel

beams," according to records at the Boston Department of Public Works.

• The MBTA's railroad bridge. Uneasy on the eye, this bridge can be seen best from the very end of the eastbound Mass, Pike. Drivers might not notice the rusty hulk beyond the overpasses and traffic. Or if they do see it, they may fail to appreciate that this 93-year-old bridge is an example of a bascule draw system, an engineering apparatus employing weights (on this bridge the square slabs on its sides). Late last century and early this, the bascule system was commonly used on drawbridges that had to fit in tight urban spaces and carry heavy loads. The draw is no longer used, because the water at the end of the Fort Point Channel is too shallow for boats, although the bridge itself still carries trains for the MBTA's commuter line and may be renovated to carry the Old Colony trains to the South Shore, according to Vincent Carbona, MBTA spokesman.

• The Broadway Bridge. In 1870, Boston decided to extend Broadway Street across the Fort Point Channel. The original bridge suffered from poor engineering: The heat of the summer made the 56-foot draw expand too much, and the return of the cold weather did not restore it to the proper size. The city rebuilt it in 1914, and again in 1952. The span was fixed in April 1959.

The 'notorious waterway'

Taken together, then, these five bridges offer more than meets the eye. "Fort Point Channel is a museum of bridges," said Felicia Clark, an urban planner with Todd Lee/FR Clark Associates: Clark is making design proposals for the development of the Fort Point area to the Boston Chamber of Commerce and area property owners.

If the channel is a museum of bridges, then its curator is Joseph Masotta, super-intendent of bridges for the Boston Public Works Department. "I grew up with bridges," he said of his almost 40 years with the department's bridge division.

"When I go, the city won't have anyone else to tell them about their bridges," he said. His meticulous files—one for each bridge owned by Boston, and then some—revealed as recently as four decades ago, seven bridges spanned the channel. But with major landfills and shifts in shipment of goods from boats and barges to railroads and trucks, the channel began to atrophy.

Now the channel is used only by lobster boats and occasional small craft. But a clipping from the May 5, 1940 Boston Sunday Post told the story of boat pilots having difficulty navigating the channel, known then as the "notorious waterway":

"Passing through it [the channel] requires the halting of six heavy flows of automobile traffic and the stopping of all trains going in and out of South Station," the Post reported. "Taking a boat up through the channel provides the boat crews with a large gathering of spectators as hundreds of automobiles and pedestrians are halted while the spans open for the vessels."

Jam on the bridge

Clark hopes to attract a less-captive audience for the bridges through her proposals, which include designs for parks, restaurants and other amenities that would make the area more pleasant for tourists and people who work in the Fort Point area. Her proposals are being made to local property owners and the Boston Chamber of Commerce, which is funding the design work.

She said, "Everyone was in there [developing the Fort Point area]. Property owners, developers, the city. We're trying to put together a comprehensive plan for the



Northern Ave. Bridge: The oldest turntable drawbridge in the country-and it acts like it.

area using public monies already allocated."

One proposal, Lobster Park, would turn the main span of the present Northern Avenue Bridge parallel to the banks of the channel. A restaurant would replace the traffic on the span, and the abutments on the shore would be used for cafes or marinas.

Whether or not the old bridge is included in development proposals, the city plans to erect a new Northern Avenue Bridge. The city has received preliminary approval for \$12.4 million in state and federal funding for the reconstruction of the Northern Avenue Bridge and two other Boston bridges.

Alfred Howard, Boston Redevelopment Authority transportation planner, said the Northern Avenue Bridge's replacement is in the engineering stages now, and it will be another four years or more before the new bridge is finished.

The original 1905 building cost of the

Northern Avenue Bridge was \$820,876, and its 1936 rebuilding cost, \$280,572. Today it takes approximately \$200,000 a year to maintain, according to Howard.

Howard said approximately 20,000 vehicles cross the turntable bridge daily, making it the recipient of constant tender loving care from the public works department. The same goes for the Congress Street Bridge with its 10,000 vehicles per day and the Summer Street Bridge with 30,000 vehicles.

Howard said, "[The Fort Point Channel bridges] are key to South Boston's residential and industrial areas, and it is fair to say that they carry an important traffic load for the city." He added, "You show more priority to these bridges because of their heavy use, and their heavy use causes them to be more susceptible to wear and tear."

A crew of 13 workers is assigned to each bridge's upkeep, said Masotta. "We check the bridges daily, and whatever needs fixing gets done." he said, explain

ing that he is on-call for maintaining the bridges at all times.

Maintenance isn't always enough, and after many "jam" sessions with the Northern Avenue Bridge, backing up traffic in the whole area, the city decided in the early '70s to replace it.

Easier decided than done. Ten years of controversy about what kind of bridge—draw or fixed—should replace the turntable one ensued.

Supporters of the fixed-span bridge argued that it would be less a traffic problem than a lift-span one and said that a drawbridge would benefit only owners of large sailboats whose masts would not fit under the fixed bridge.

Fixed versus lift

Proponents of a drawbridge argued that a well-designed, modern draw would open and close in minutes, not affecting traffic flow drastically. They also said a drawbridge would maximize the channel's potential as an active waterway. The lift-span advocates suggested that water taxis from downtown to Logan Airport might be one form of transportation made easier by a drawbridge that would benefit the public.

The fixed-span advocates won. But the Boston Tea Party Ship and Museum will feel keenly the effects of the decision. The Tea Party ship must be taken out of the channel every five years for rehabilitation, said the director of the company, Barbara Attianese. And a fixed-span bridge that does not allow room for the ship's mast will make the process difficult, "not impossible, but difficult."

However, Attianese admitted that any new development in the channel area would benefit the tourist business. Nine years ago when she joined the ship's staff, "Walking on Congress Street Bridge was like crossing the path to an unknown part of town," she said. "Now the area is so much more active. There are even people walking around down here in the