Facts, Figures On Bridge, Approaches Add Up To Bigness

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Any way you look at it, the new Baker bridge is big

First, it's expected to carry 19,000 vehicles a day.

SECOND, it contains enough steel itself to build 5,156 new cars. (This many cars would make a line 17 miles long—bumper to bumper.)

It cost a total of $5,500,000. (Lighting it alone cost $19 000.)

It took four years and more to build. (The first contract was awarded Aug. 30, 1954. Work started Nov. 12 the same year.)

It required 16,398 cubic yards of concrete, enough to build 4.2 miles of paving 24 feet wide and 10 inches thick.

Its two main piers alone contain 4,360 cubic yards of concrete, enough for 1.1 miles of such pavement.

Form work on a concrete job ordinarily is incidental. But on the bridge piers, the contractor received $59,000 to build a coffer dam before he even started on the concrete work.

ALL THESE figures come from the Peoria district of the state highway department.

Here's the way the engineers there break down the $5,500,000 cost:

Roughly $1,175,000 for the substructure, or piers; $2,600,000 for the steel itself; $1,120,000 for erecting the steel; $480,000 for the bridge floor; $80,000 for painting; and $19,000 for lighting.

There were eight separate contractors.

If you prefer another comparison on the steel, there's enough in the bridge to build 722 Caterpillar D7's or 46 miles of railroad track.

Included are 1,209,350 pounds of steel in the piers for reinforcement, 928,760 pounds for reinforcing the floor, and 16,630,900 pounds of structural steel.

The Baker bridge is 3,114 feet long. The McClugage bridge, newest of Peoria's other three bridges, is longer . . . 4,000 feet over water, 4,695 feet altogether.

But the Baker bridge is the widest, of course. It has a 56-foot roadway, curb-to-curb. And it's four lanes.

It's also the widest from the standpoint of navigation — 500 feet horizontal clearance for boats, compared to 411 for the McClugage.

The highway department lists its vertical clearance at 63 feet 8 inches. The Corps of Engineers calls it 65.7 feet.

The Corps puts the McClugage bridge clearance at .1 of a foot more.

ALL OF THESE figures are from pool level. Highwater level is about 19 feet above this —but there'll still be plenty of clearance for river traffic, says D. M. Costello, assistant district highway engineer.

From normal water level to the top of the bridge's truss is 148 feet.

The Baker bridge will become the 21st highway span across the Illinois. (This is from the confluence of the Des Plaines and Kankakee rivers to the Mississippi. The Cal-Sag channel on to Lake Michigan boasts 20 highway bridges alone.) This is according to Corps of Engineers records.

The relatively new bridge at Beardstown is bigger, navigation-wise. It has 526 feet horizontal clearance, 69.7 vertical.

The next newest bridge is at Peru, but it's smaller. It replaces an old, wooden, swing-type span, dating back before 1900.

THE BAKER BRIDGE will become the 15th fixed-level highway bridge over the Illinois. There are four-lift-bridges (Pekin's among them), one swing-type (at Utica), and one bascule (Franklin st., here in Peoria).

It will be just short of 163 miles from the Mississippi river. tBeardstown is 88 miles. Havana 119, the beginning of the Illinois 273 miles.)

There's still one ferry operating on the Illinois. It's at Pearl, near the far southern end of the Illinois.

Back in 1940, there were 34,000 cars a day crossing the Cedar and Franklin st. bridges. In 1950, after the McClugage bridge was opened, the total for the three was 50,000.

ADJUST TO CONDITIONS

Motorists should adjust the speed of their car to traffic road, and weather conditions Regulatory signs authorizing high speed limits are meant for ideal conditions, and not for wet, icy, or snow-covered roads